MISSOURI BOTANICAL GARDEN

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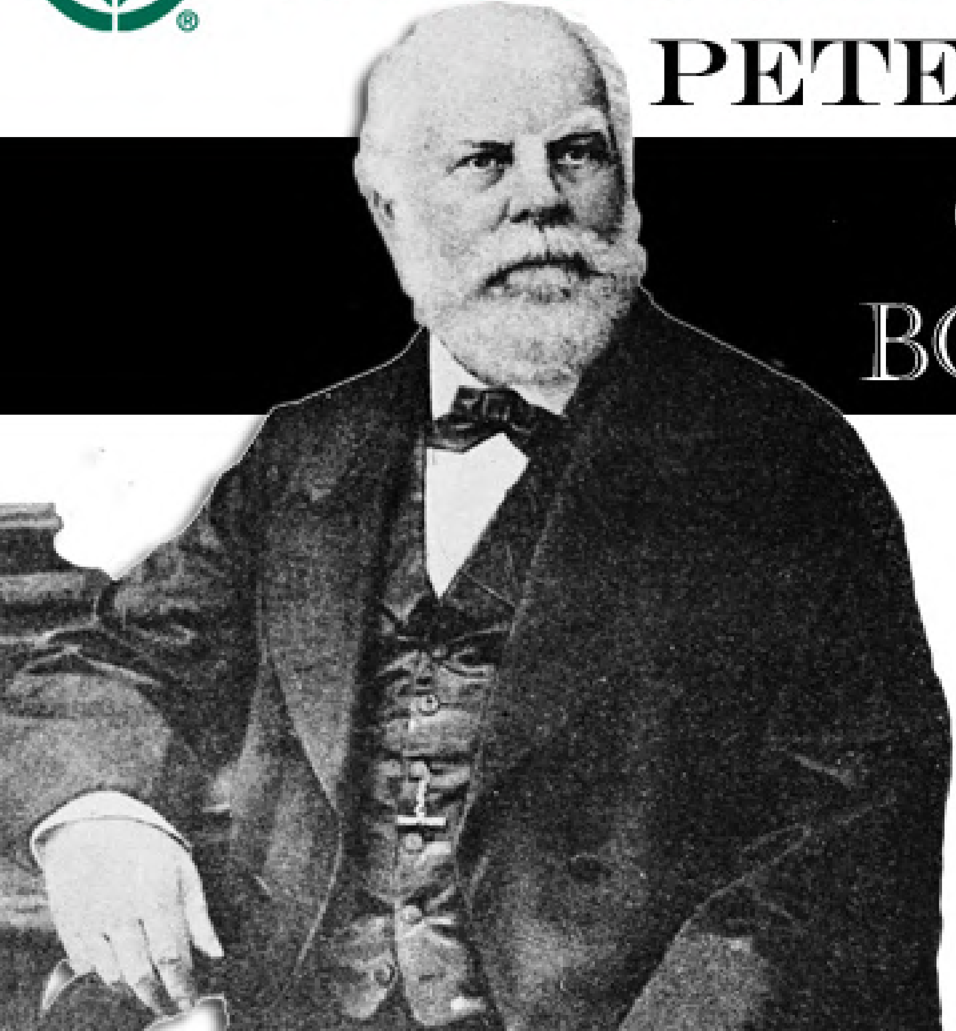


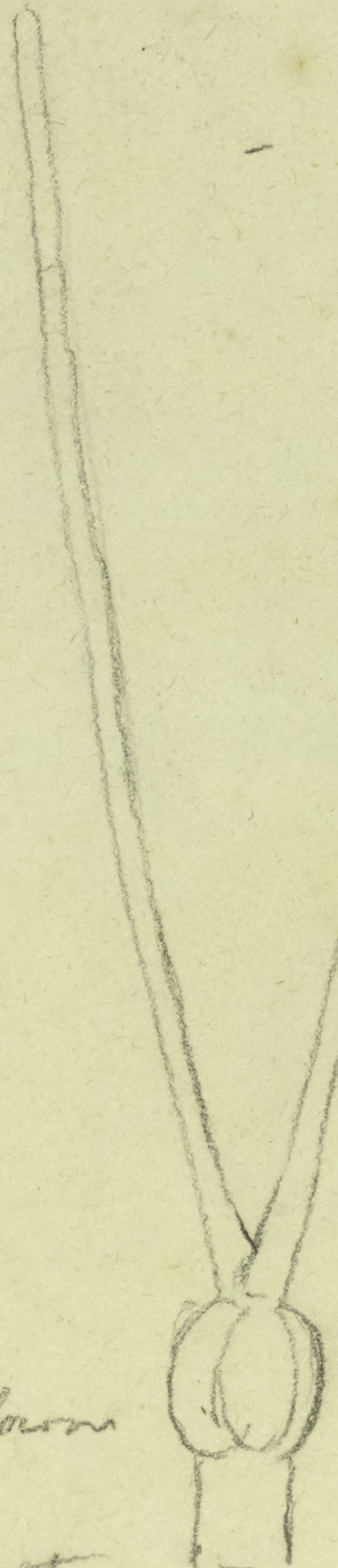
Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

SHOUT
SHARE
IT

Cell

Dec 15. 1864

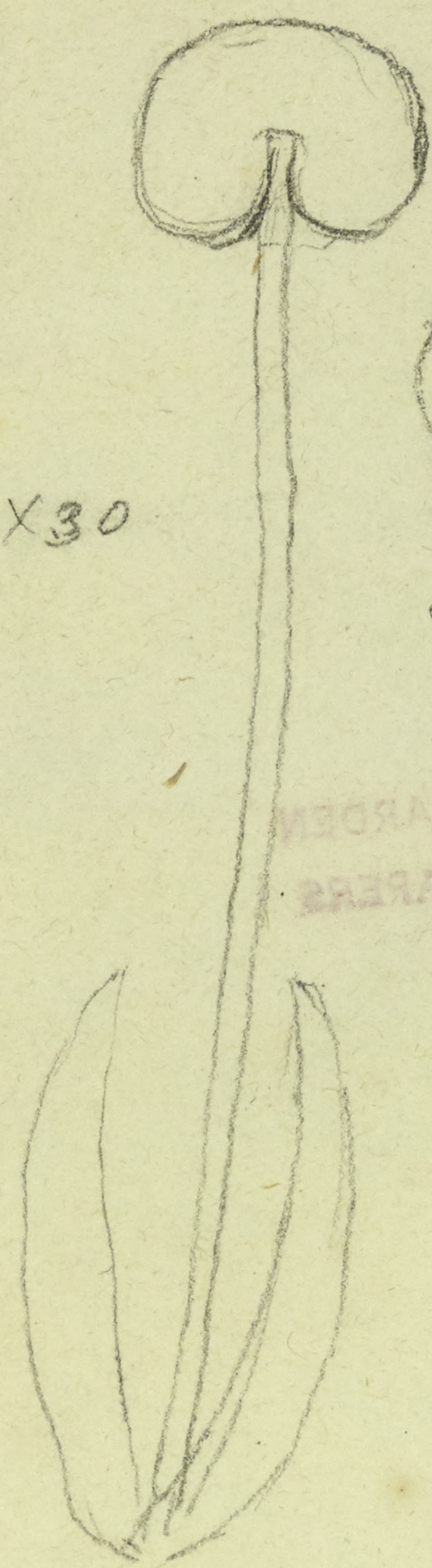
Chili. Cl. Gay



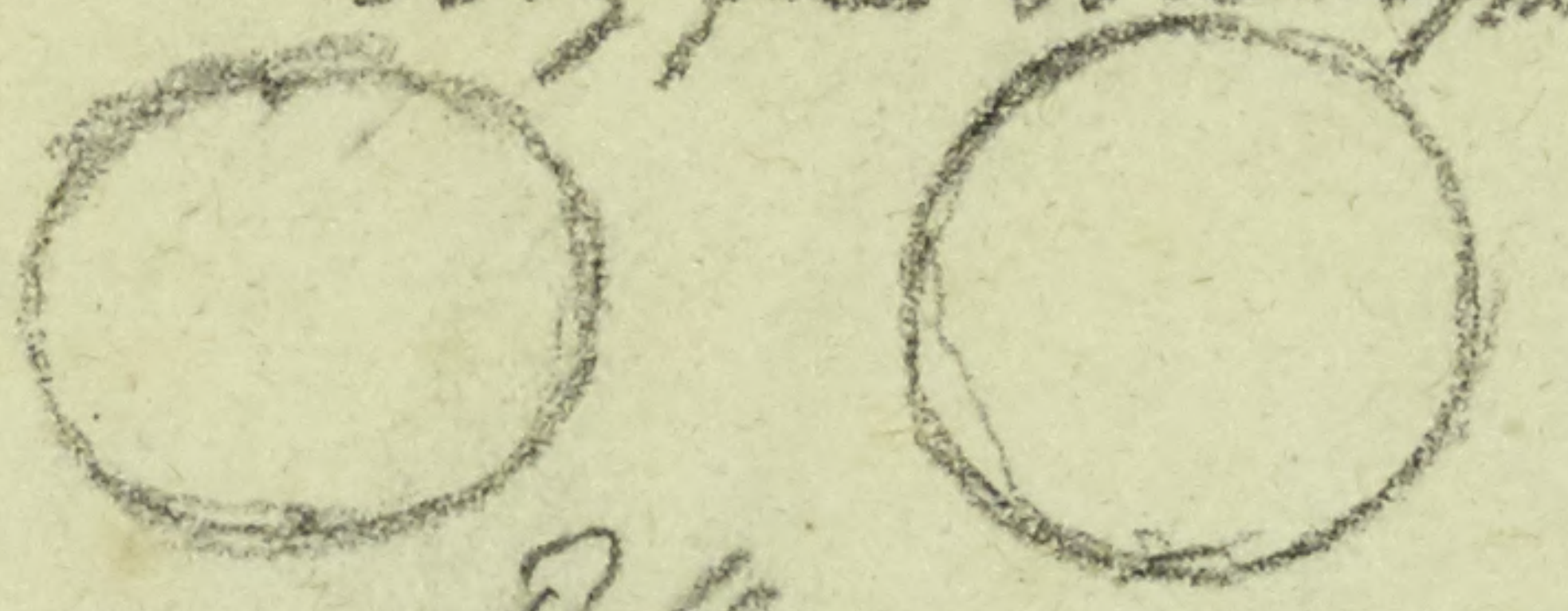
few flowers

no bracts seen

X30



anthers
unopened, containing
very few Pollengrains



0.026-0.027

Pollen
x415
oval or globose

Styles at first erect, but
soon recurved

878

ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

878

0 1 2 3 4 5 6 7 8 9 10
cm
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MISSOURI
BOTANICAL
GARDEN

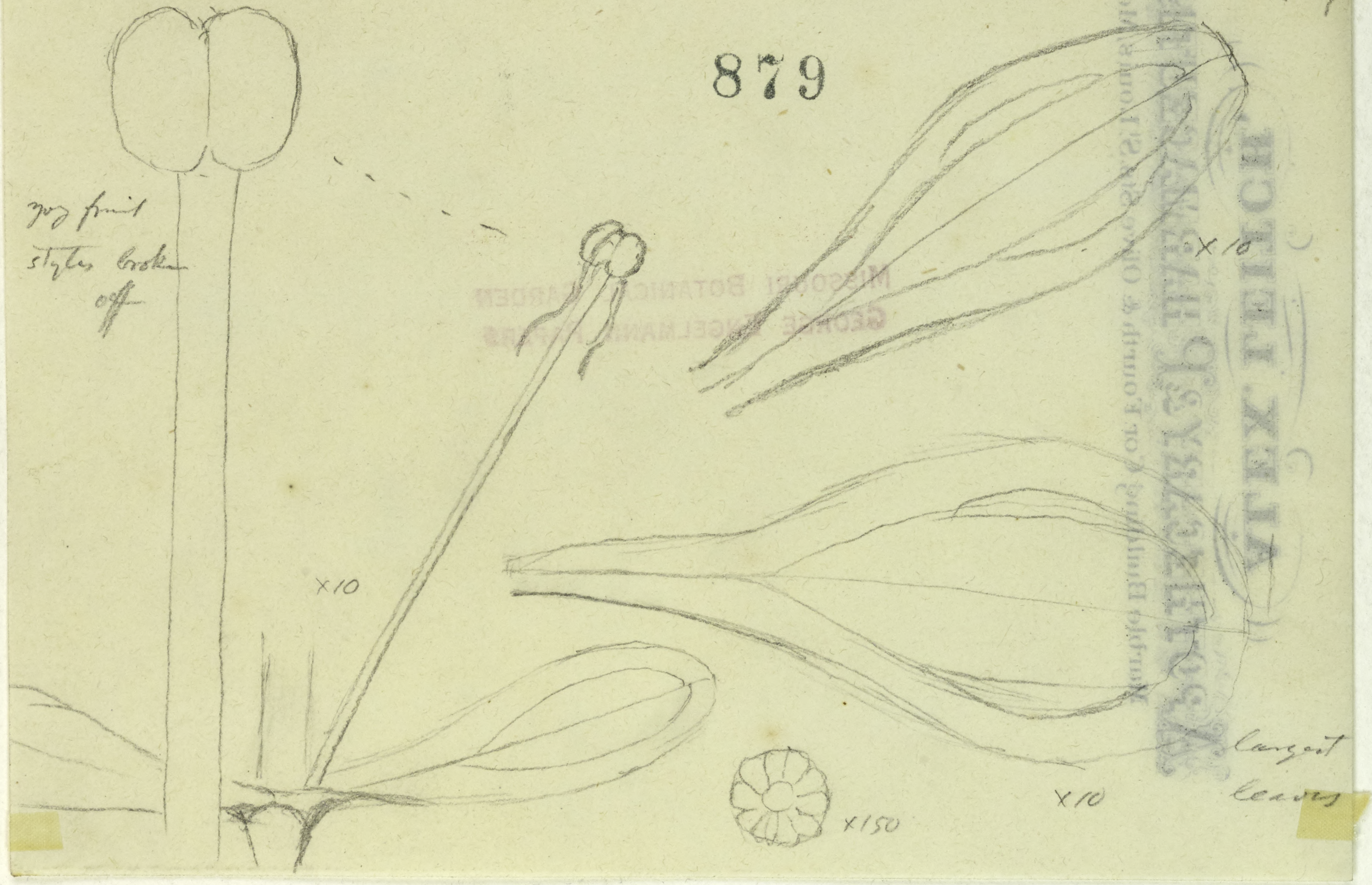
Call

15 Dec 1864

Chili

Cl. Gay — in Hb A Gray

879


x30
yng fruit
styles broken
off
x10
x10
x150
x10
largest
leaves

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879

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MISSOURI
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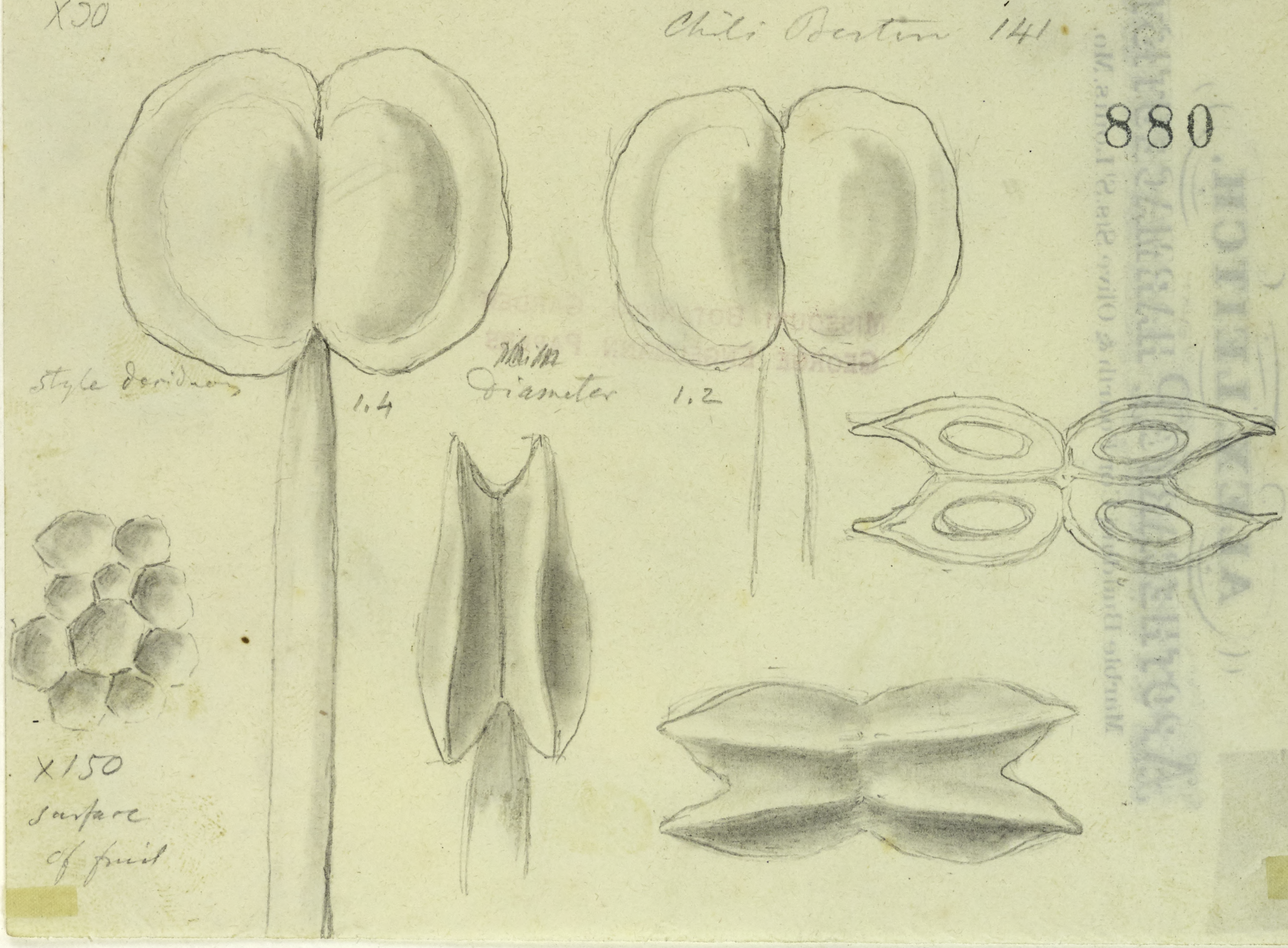
Callitriche

Sept 3d 1864

Chili Bertero 141

880


X30
style deciduous
1.4
Millim
diameter
1.2
X150
surface
of fruit

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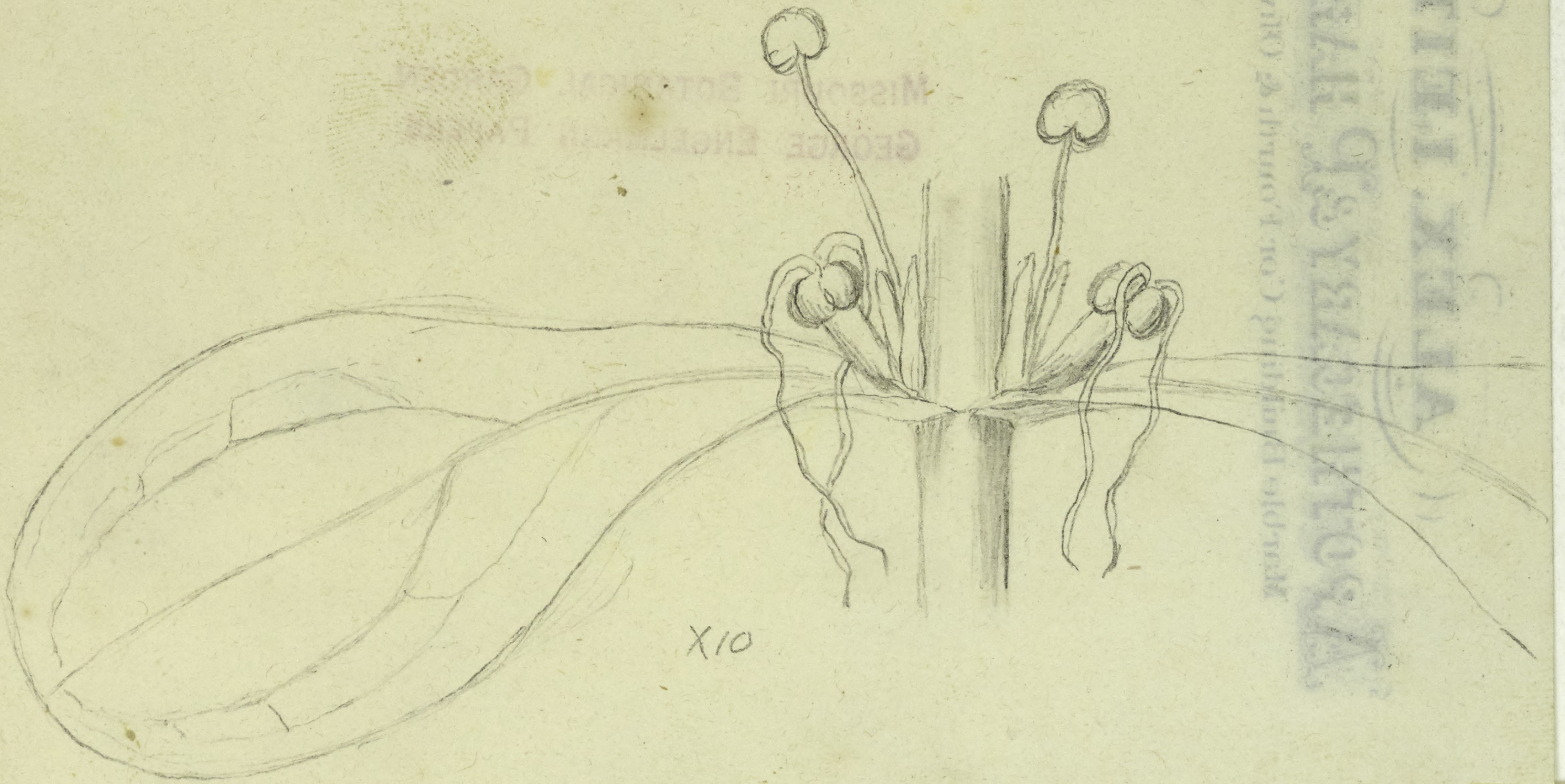
Callitriche

Sept 3d 1864

Chili Bertero 141

881



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cm
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Missouri Botanical Garden

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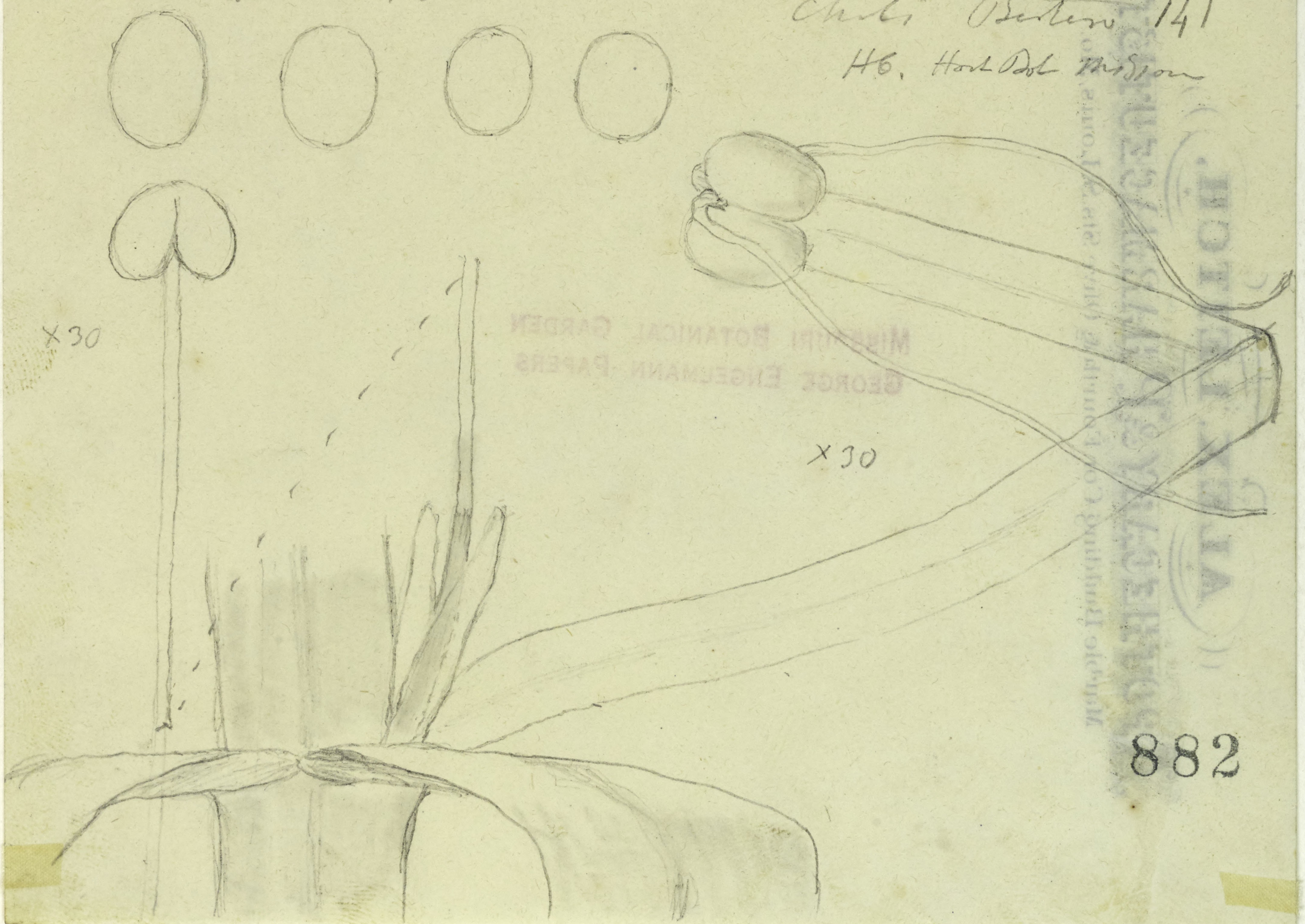
Callitriche

Sept 3d 1864

Chili Bertero 141

Hb. Hort Bot Missouri


Pollengrains x 415
x 30
x 30

882

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cm
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Callitriche · verna ~~[illegible]~~

Genuina, [illegible], obovata

heterophylla	linearis	brevifolia
Europaeae		
Kützing 0.9–1.0 mm Hb. [illegible]. B M		Petersburg, Regel. 1.0–1.2 Hb Gr. 0.9–1.1
Japan, Wright 0.9–1.0		Schkuhr. H. B. M. 0.8–1.0
German Hb. Benth 0.9–1.1 1.0–1.2		Carlsruhe 0.8–1.0
Americanae		
Lake Superior Hb. Gr. 0.8–1.2		Delaware Wt Gap Collins 0.9–1.1
California 0.9–1.2		Sunderland Connecticut Riv Tuckerm 0.8–1.0
C Brew Califor Bigel 1.1–1.4		
Connecticut? Hb Gr 0.8–1.1		
Orange Co. Austin 0.9–1.1 0.9–1.2		Orange Co Austin 1.0–1.2
Rocky Mts Hall 0.9–1.1		Pierce Co Wisc Hale 0.8–1.1
Fairfield Hadly Hb Gr. 1.0–1.3		
Buffalo Clint 0.9–1.1		
Quebec 0.8–1.0		
N Brunswick 1.1–1.3		
Osborn Lake 1.0–1.2–1.3		
Milwaukee 0.8–1.1		
St Croix, Parry 0.8–1.0 –1.1		

883

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Pollen of C. verna

Lake Osborne, Col. 0.027 × 0.024 mm

Cattaraugus N.Y. —— 0.032 × 0.029

0.024 × 0.020

0.024

Fairfield Ct —— 0.022 × 0.018

0.0.22

0.0.18

884

Kützing —— 0.029 × 0.022

—— 0.027

0.022

Californ. —— 0.023 × 0.020 & 0.020 × 0.016

Pollen mostly globose 0.022–0.028 diam (rarely 20–30

more rarely elliptic 0.022–0.029 × 0.018–0.032

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MISSOURI BOTANICAL GARDEN

Leitch & Corlies
DRUGGISTS
South-west Corner Fifth and Market Streets

Impossible to divide the species
for want of fruit. 885
The leaf is very peculiarly
rhombic, much like that figured
by Hegelmaier as C. macropteryx of
New Holland, ~~also said by him in new Holland~~ over

and some form of Asa Grayi!
see Pl. III. fig 9. & IV. fig 2. g

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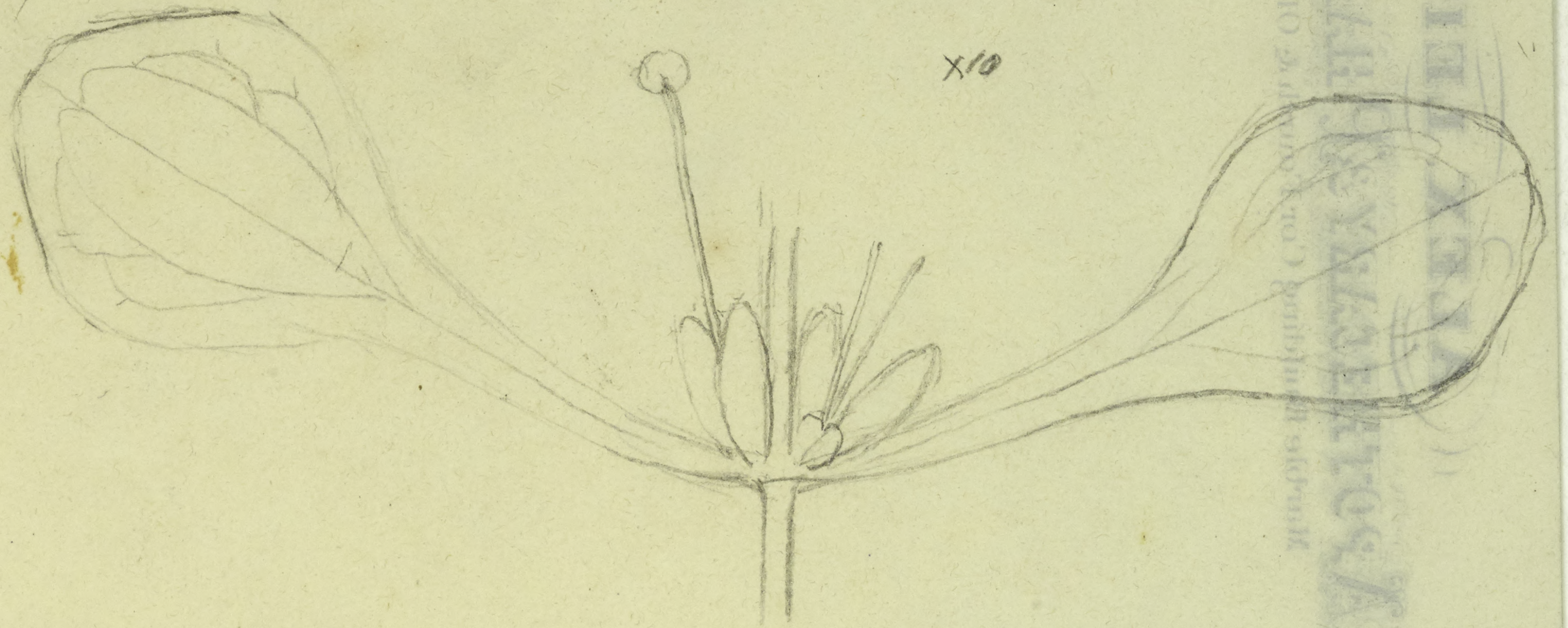
Callitriche

Octob 8 1864

Brunette River, British Columbia
May 1857. C. B. Wood
: Herb Gray

886



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5090. Callitriche verna
longistyli; cyclocarpa

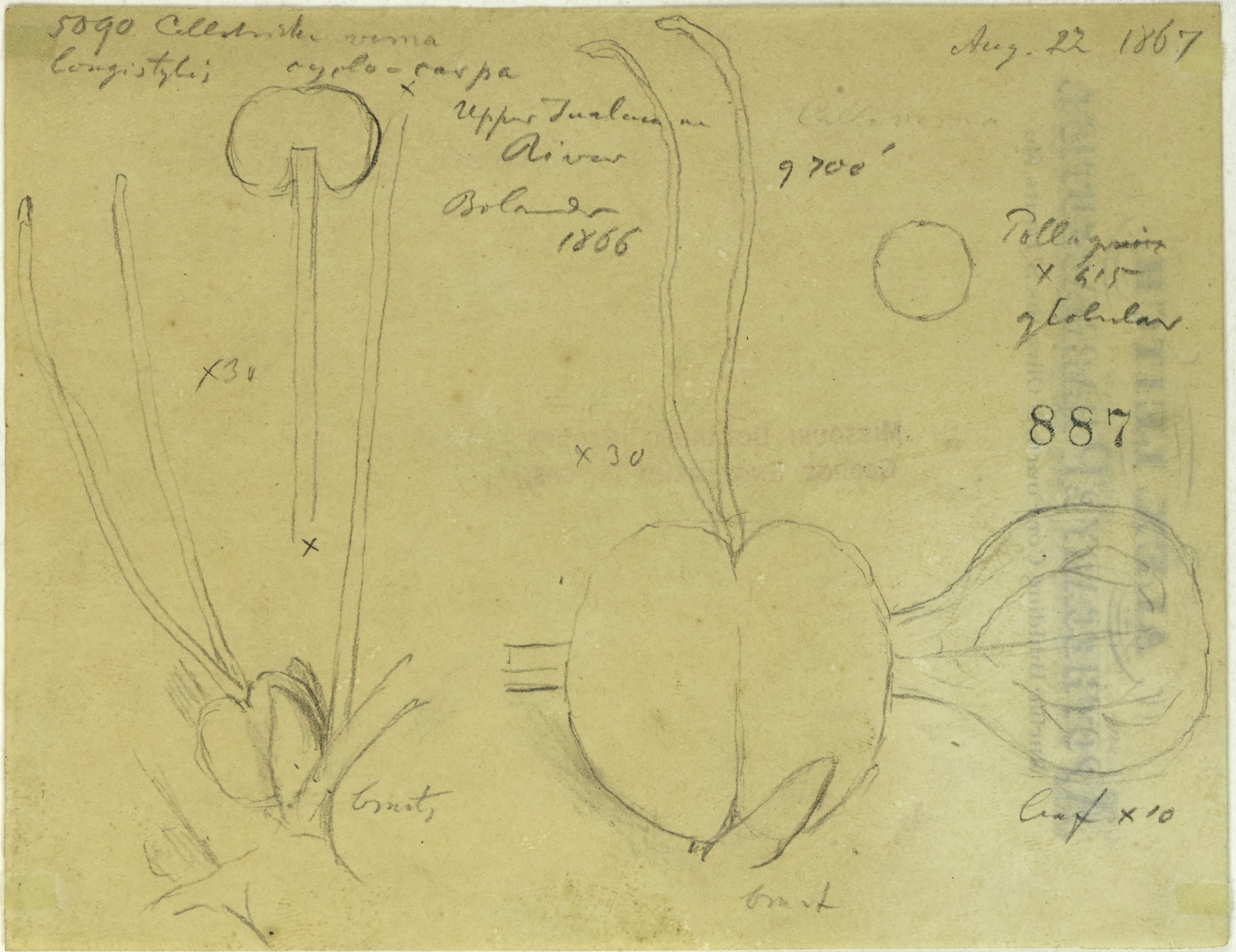
Aug. 22 1867

Upper Tuolumne River
Bolander
1866

9700'

Callit. verna

887


×
×30
×
×30
Pollen grain
× 515
globular
bracts
bract
leaf ×10

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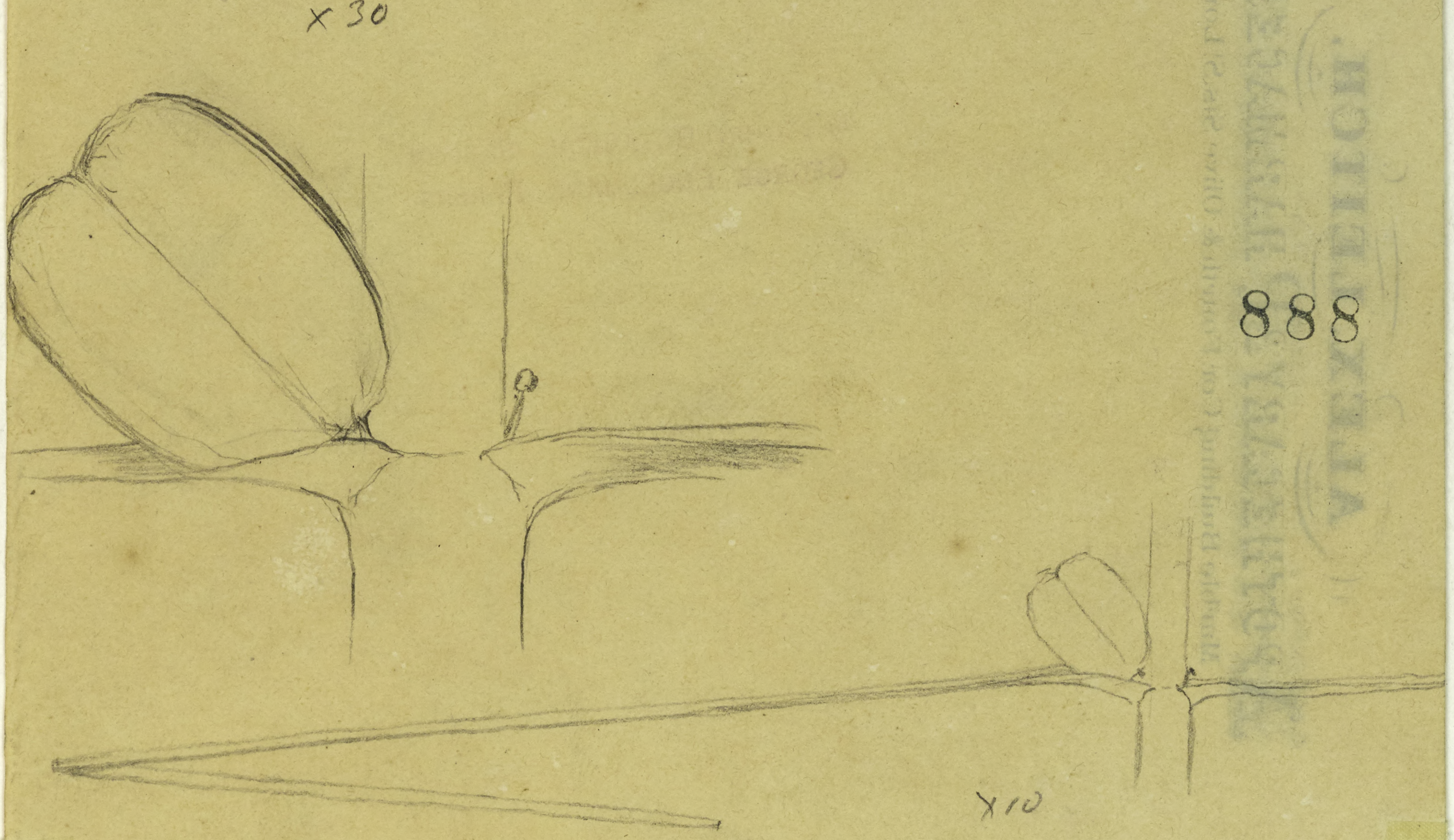
5090

C. vernalis var
submerged form, Bolander App II p. 108
Tuolumne River, 9700'

Aug 22 1867

Bolander 1866



888

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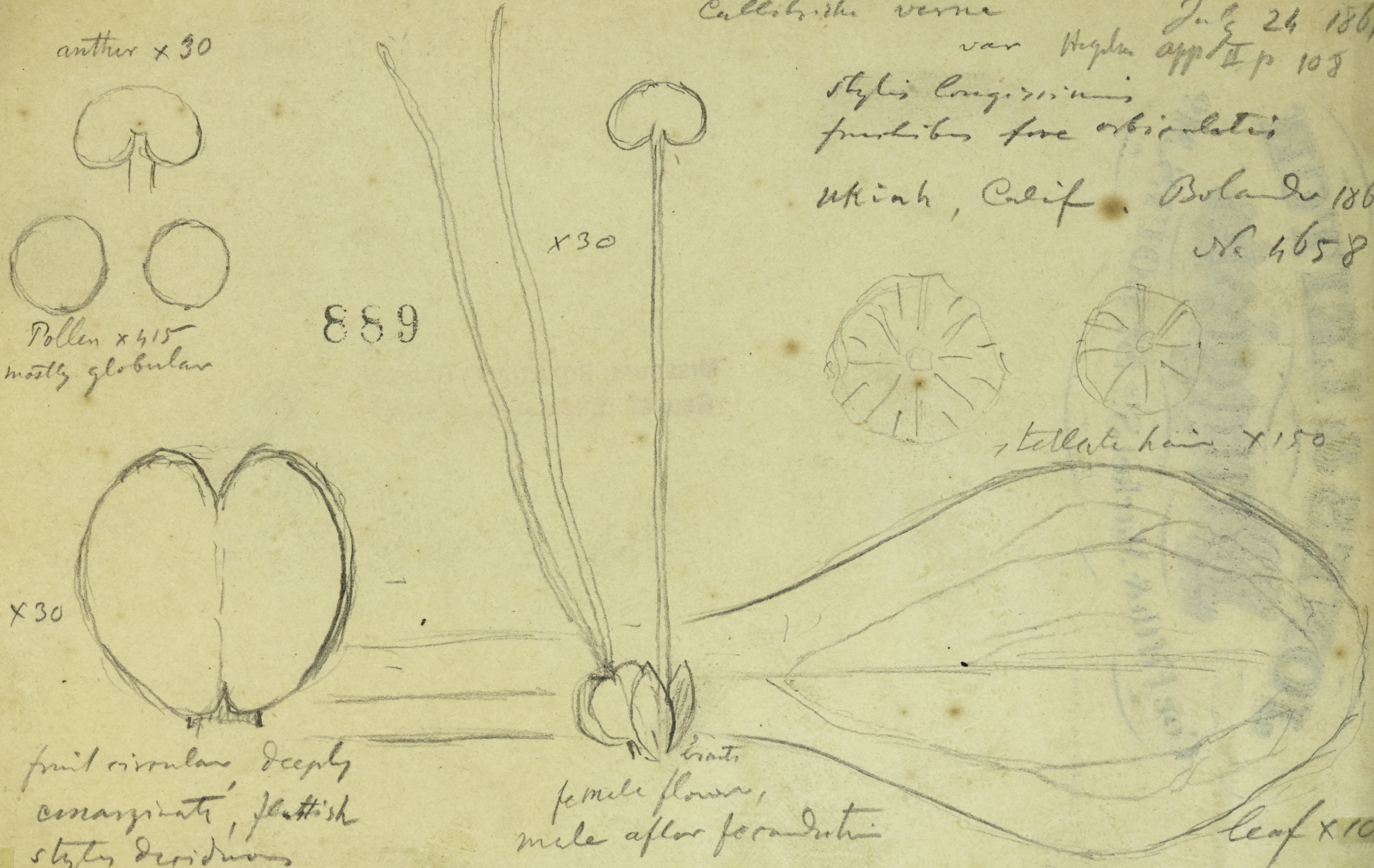
Callitriche verna July 24 1867
var Hegelm app. II p 108
stylis longissimis
fructibus fere orbicularis
Ukiah, Calif. Bolander 1866
No 4658

889


anther x 30
Pollen x 415
mostly globular
x 30
x 30
stellate hairs x 150
bracts
leaf x 10

fruit circular deeply emarginate, flattish styles deciduous

female flower, male after fecundation

JONES & LEITCH
Druggists
Cor: Fifth & Market St^{s}: St. LOUIS, M^{o}.
J. McKittrick & Co 56 N. Main St.

Callitriche verna

macrocarpa

Dubia, vix cristata, ad C. Asa Grayi transiens

heterophylla		linearis	brevifolia	
Elliott. Sketch (Hb Gr.)	1.0-1.0		Philad. Pickering	0.9-1.0
S. Carol Leitner	1.0-1.1		Dedham Hb. Gr.	0.9-1.0
			Buffalo, Clinton	0.9-1.0

890

ALEX. LEITCH,
APOTHECARY & PHARMACEUTIST,
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

890A

so much interest among scientific men.* And such was his energy that, almost unaided, he gathered in a few weeks the extensive collection of fossil bones which furnished to Dr. Leidy the materials for his splendid memoir on the "Extinct Fossil Fauna of Nebraska." At the same time he collected a large and elegant series of Cretaceous fossils, some of which were described and figured by Dr. Owen in his final report on the Geology of Iowa, Wisconsin and Minnesota. The notes made by Dr. Evans on the geological features of that remarkable region were likewise of the highest interest, and from these Dr. Owen has compiled one of the most instructive and beautiful chapters to be found in his valuable report. In addition to his scientific duties, Dr. Evans had almost exclusive control of the business department of Dr. Owen's survey, which of itself involved an immense deal of labor. The satisfactory manner in which he discharged these onerous duties, often in the midst of disheartening privations and even danger, commanded the highest esteem and confidence of Dr. Owen and his associates, while his goodness of heart, uniform courtesy, and self-sacrificing disposition, secured to him their warmest friendship.

After the completion of the field work of the North-west Survey, (1850,) Dr. Evans received the appointment of U. S. Geologist for Oregon, which he accepted, and immediately entered upon the duties of his new office with his usual energy and zeal. The survey was organized by the appointment of Dr. B. F. Shumard to the position of Principal Assistant, who shortly after embarked for Oregon, by way of the Isthmus of Panama. Dr. Evans determined to revisit Nebraska, and thence proceed overland to Oregon by an unexplored route, with the view of determining the general geological and topographical features of a vast region, then almost unknown to science, and of ascertaining if there existed a nearer way from the Upper Missouri to the Oregon coast than that usually travelled. He proceeded to St. Louis, and there spent a few days in making preparations for his journey. He then took passage for Fort Pierre Chouteau, on board a steamer belonging to the American Fur Company. During this passage, which occupied nearly a month, cholera to an alarming extent prevailed among the passengers and employees of the Fur Company on board, several of whom died, and the mortality would have been far greater but for the kind attention of Dr. Evans, who, though himself laboring under an exhausting diarrhœa, allowed himself no rest, but in the triple capacity of physician, nurse and companion, was ever at the bed-side of the sick, administering to their wants, and encouraging them by his cheering words.

From Fort Pierre, Dr. Evans again visited the Mauvaises Terres, where in a short time he succeeded in obtaining a large collection of the fossil fauna of that region, even more extensive than his former one, and embracing a considerable number of new and interesting species. On his return to the Fort he set about preparing for his long journey, which from the hostility of the Blackfeet and other Indian tribes, together with the difficulties incident to the route, was regarded by the Indian traders as extremely hazardous; hence it was exceedingly difficult to find either guides or hunters willing to accompany him. After much persuasion, however, he succeeded in procuring the services of two hunters and a half-breed guide, they agreeing to go with him as far as the Flathead Village. With this meagre escort he started from Fort Pierre, but scarcely had he reached the borders of the Blackfeet country ere his hunters became alarmed, and unceremoniously left his camp during the night and returned to the Fort. Under these discouraging circumstances a person less courageous than Dr. Evans would have turned back; but difficulties served only to develope the indomitable energy of his character, and with but a single man as his escort, and no other guide than his compass, he determined to continue on his course. After a wearisome travel of many days, and having encountered many privations and dangers, he and his companion, Cadotte, arrived safely, but in almost a starving condition, at the Flathead Village, situate on the western slope of the Rocky Mountains. In accomplishing this part of his arduous task, Dr. Evans passed directly through the heart of the Blackfeet country, and travelled a distance of more than two hundred miles in the main chain of the Rocky Mountains before he succeeded in finding a passage to the valley beyond. It is much to be regretted that the credit of the discovery of this important pass, which unquestionably belongs to the subject of the present sketch, has been unjustly transferred to another. It should have been named in honor of Dr. Evans instead of Cadotte, since it is well known that the latter person had no knowledge of such a passage, and, in fact, had not even been in that region before he went there under the guidance of Dr. Evans. After a few days' rest at the Flathead Village our traveller resumed his journey, and without encountering further difficulties, reached Oregon city with much valuable information concerning the extensive district of country through which he had passed.

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* To Dr. Hiram A. Prout is justly due the credit of having first called attention to the existence of such remains in that region by his excellent memoirs of Palæotheroid and other bones, published in Silliman's Journal.

Callitriche verna
Dubia, vix costata, ad C. Asa Grayi transiens

fruit
0.9–1.0 mm broad
1.0–1.1 mm high

50-2

In the prosecution of the geological survey of Oregon and Washington, Dr. Evans was actively engaged for nearly five years, during which period his travels extended over a large portion of those Territories. The results of his important labors, embracing a large amount of information relating to the geology, topography, geography and natural history of that interesting portion of the American continent, are embodied in his large report submitted to, and ordered to be printed by Congress at its last session. It was placed in the hands of the Public Printer only a few days previous to the death of its lamented author, and it is a matter of deep regret, that, owing to some informality, its publication must be delayed to await the further action of Congress. It is earnestly hoped that Congress will, at an early period, make the necessary provision for the printing of this important document, the preparation of which has cost such a large expenditure of labor and money, and which promises to be of the highest value to science and the people for whose benefit the survey was ordered.

September 2, 1861.

The President, Dr. **Engelmann**, in the chair.

Seven members present.

The following donation to the library was received: Bull. de la Soc. Imper. zool. d'Acclimatation, Paris, No. 7, Juillet, 1861, *from the Society.*

Mr. Holmes presented from Dr. B. F. Shumard the following skulls from Texas: *Felis pardalis*, Linn. (Tiger-cat), from Travis Co.; *Felis onza*, Linn. (Jaguar), from Hays Co., and *Dicotyles torquatus* (Peccary), from Travis Co.

Dr. Engelmann made some remarks on the temperature and humidity of the past three summer months. June and August were by more than two degrees warmer than the averages for these months, while July was cooler. The quantity of rain for each of these months was below the average

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MISSOURI
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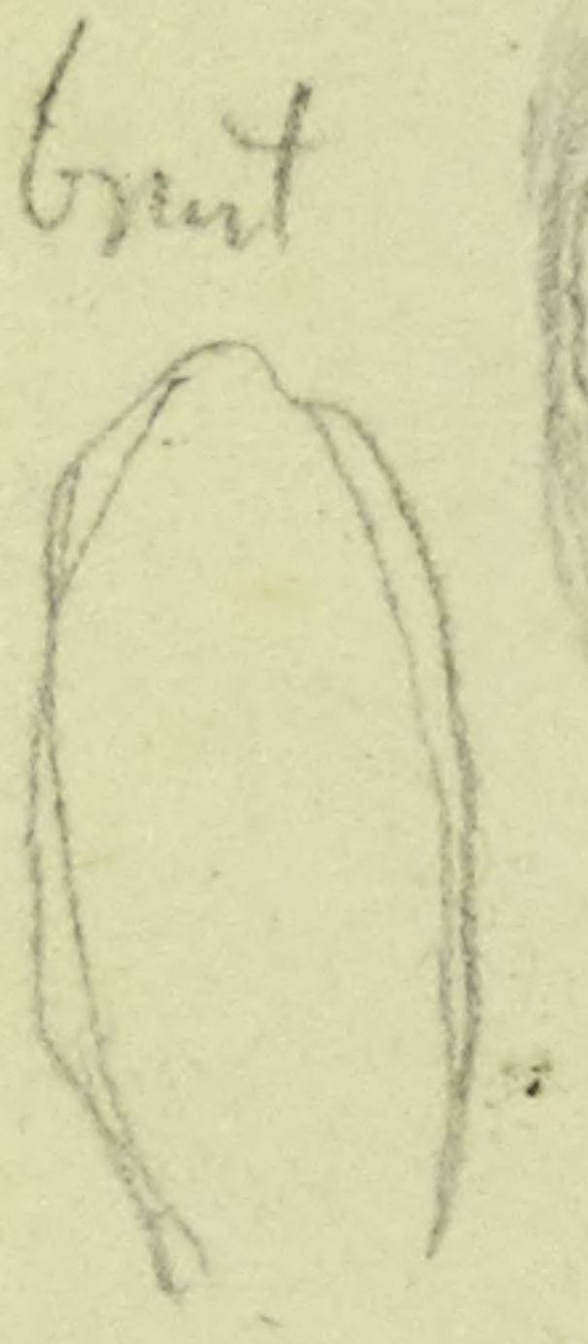
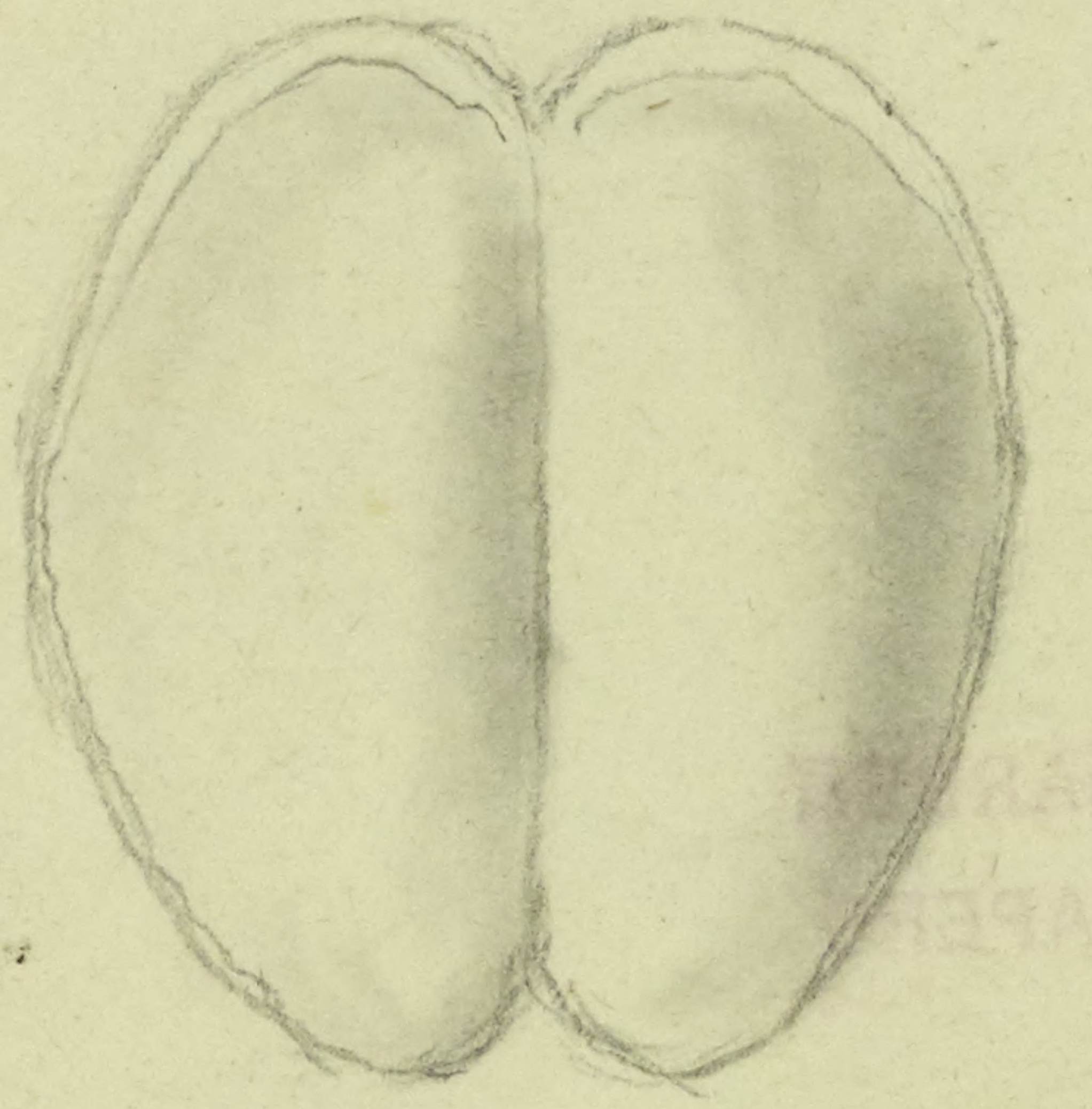
Callitriche

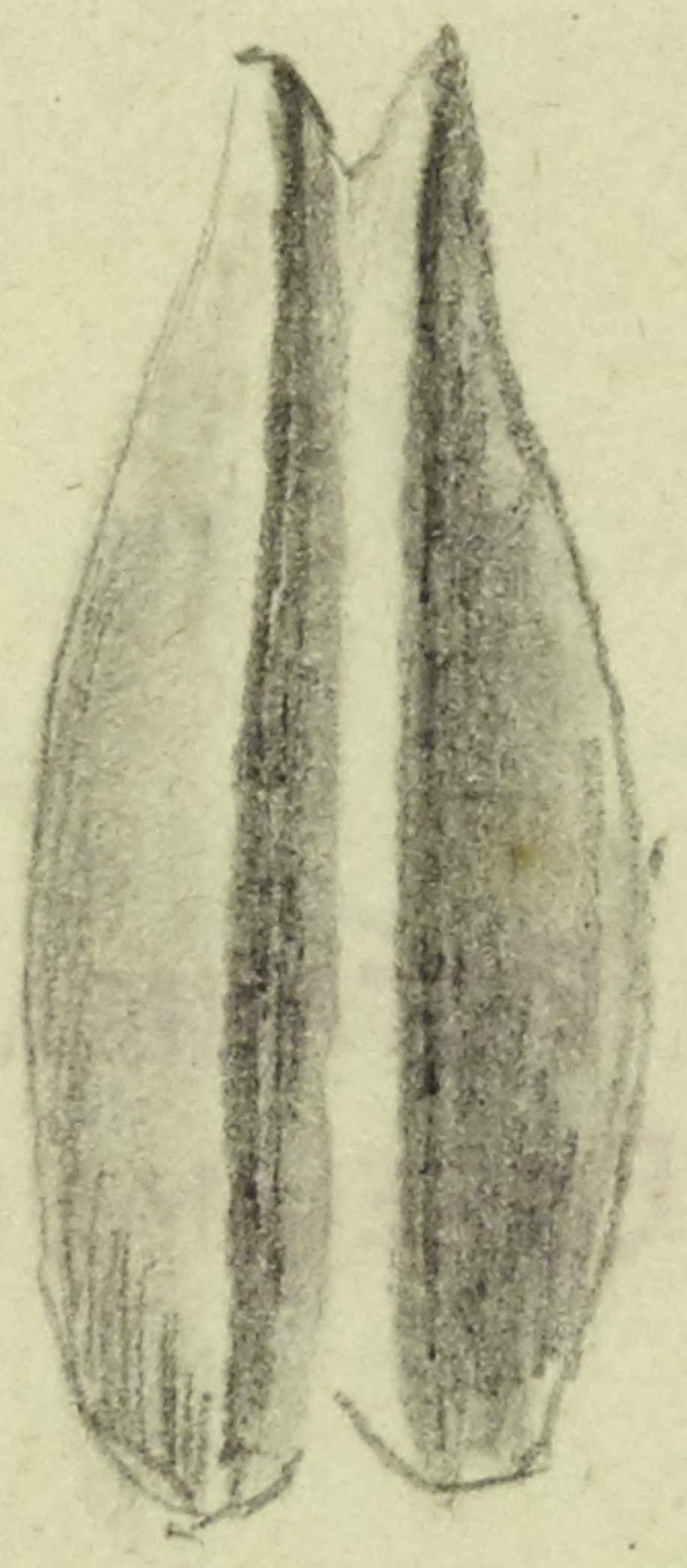
Oct 7 1864

South Carolina, Leitner in Hb. Gray

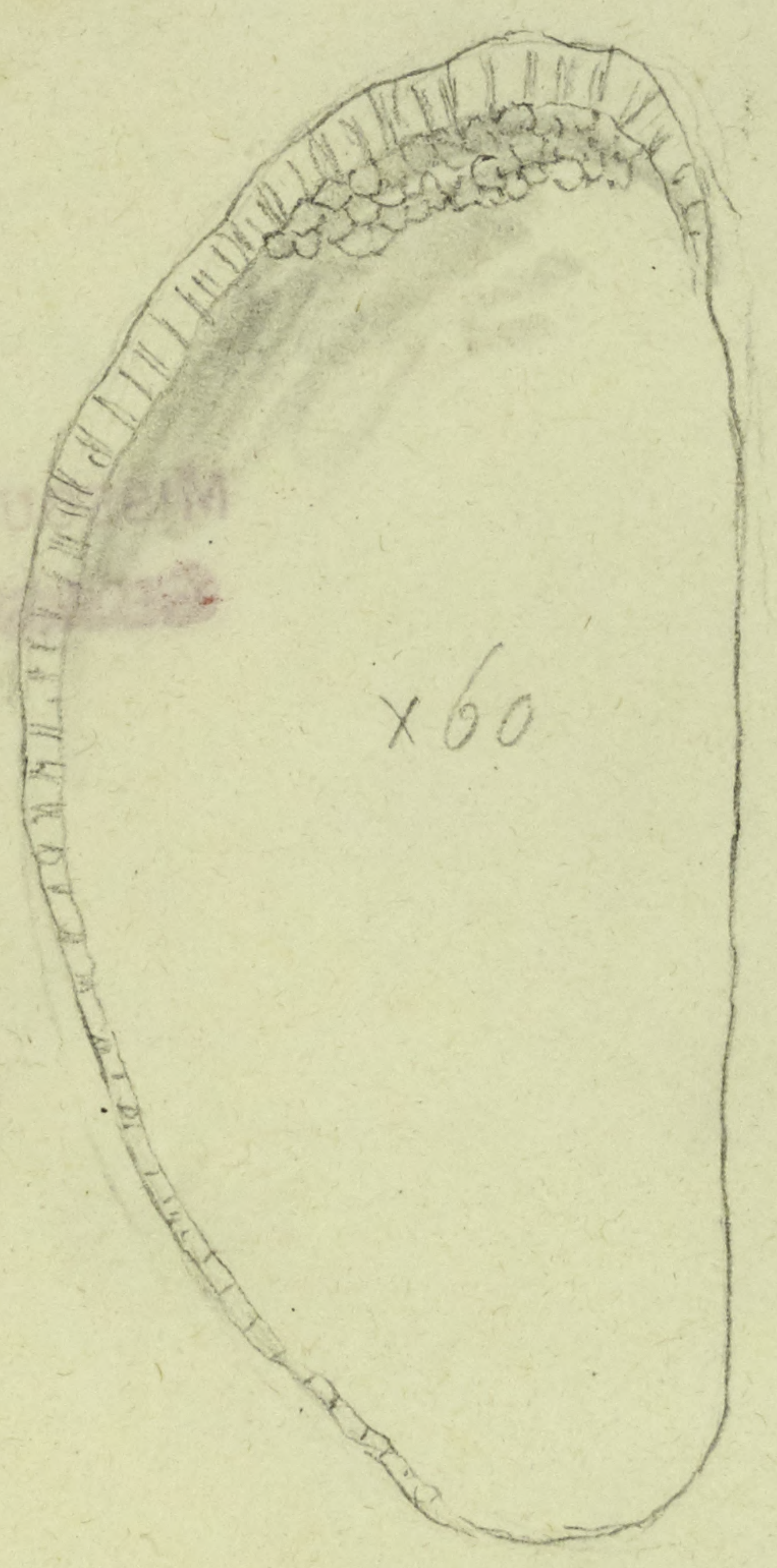
891







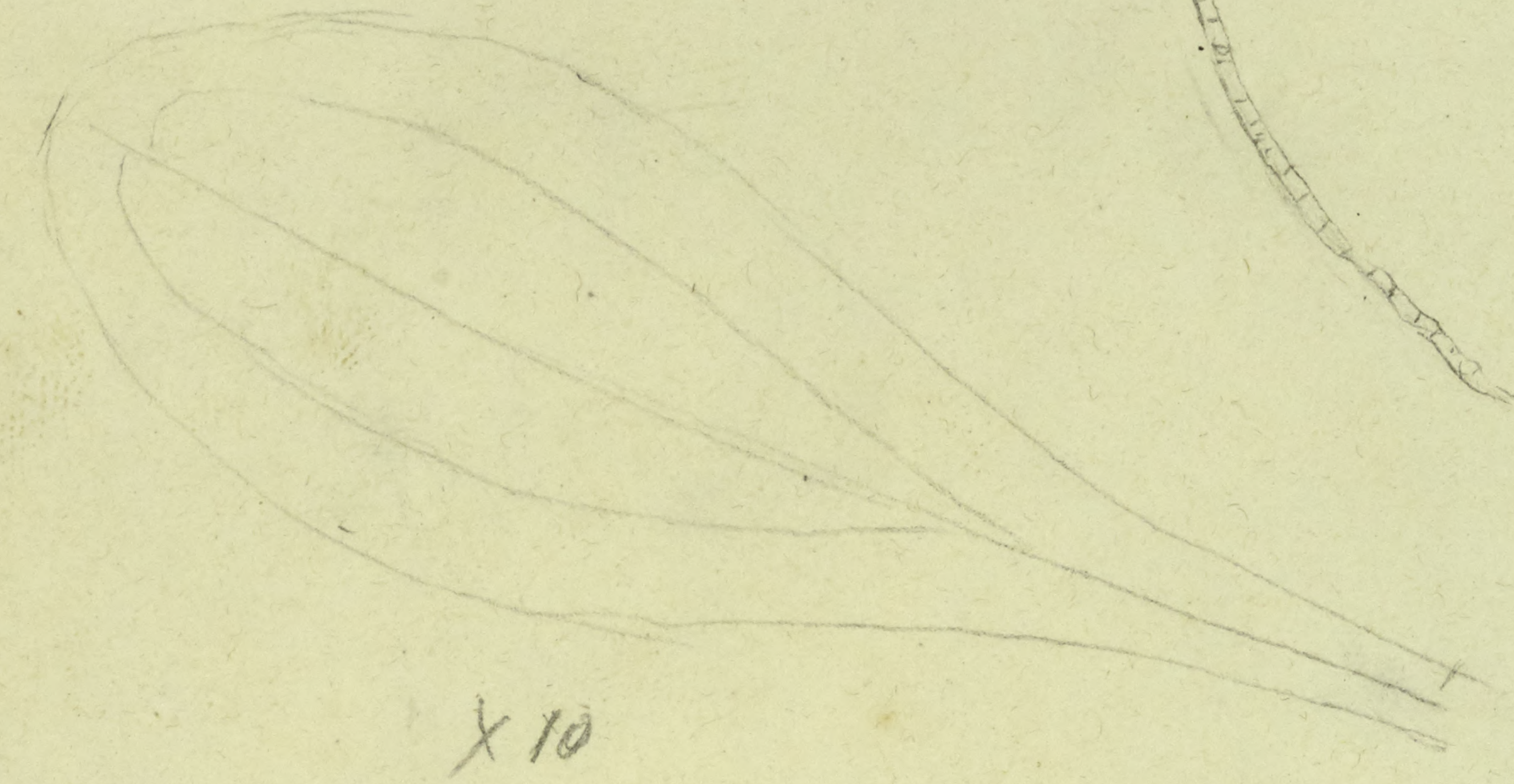
30 x 32 / 30 = 1.0 x 1.1 mm



bracts half as long as fruit

—

a plant from very shallow water or on mud, perfectly developed



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cm
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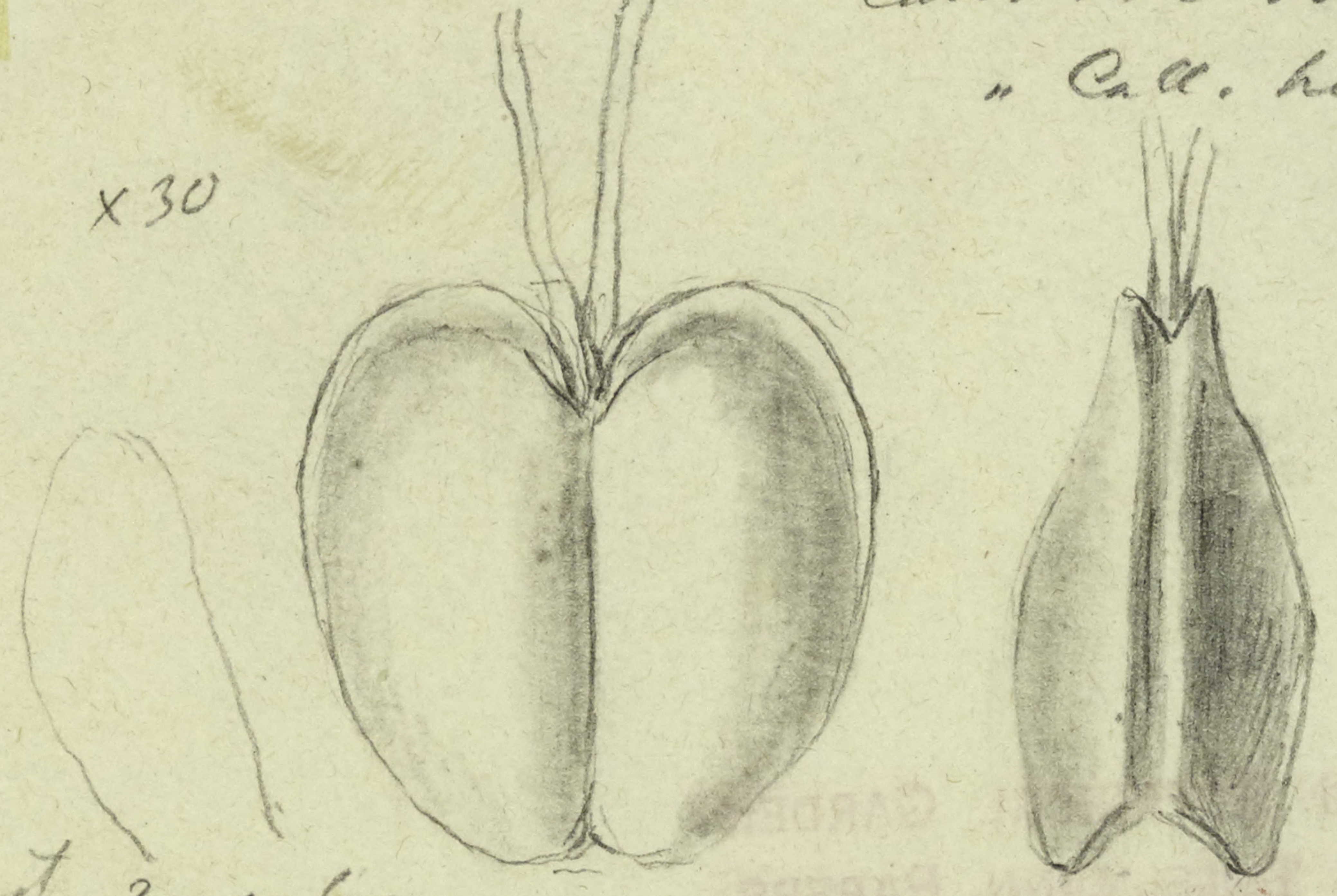
Callitriche verna   Oct 8 1864

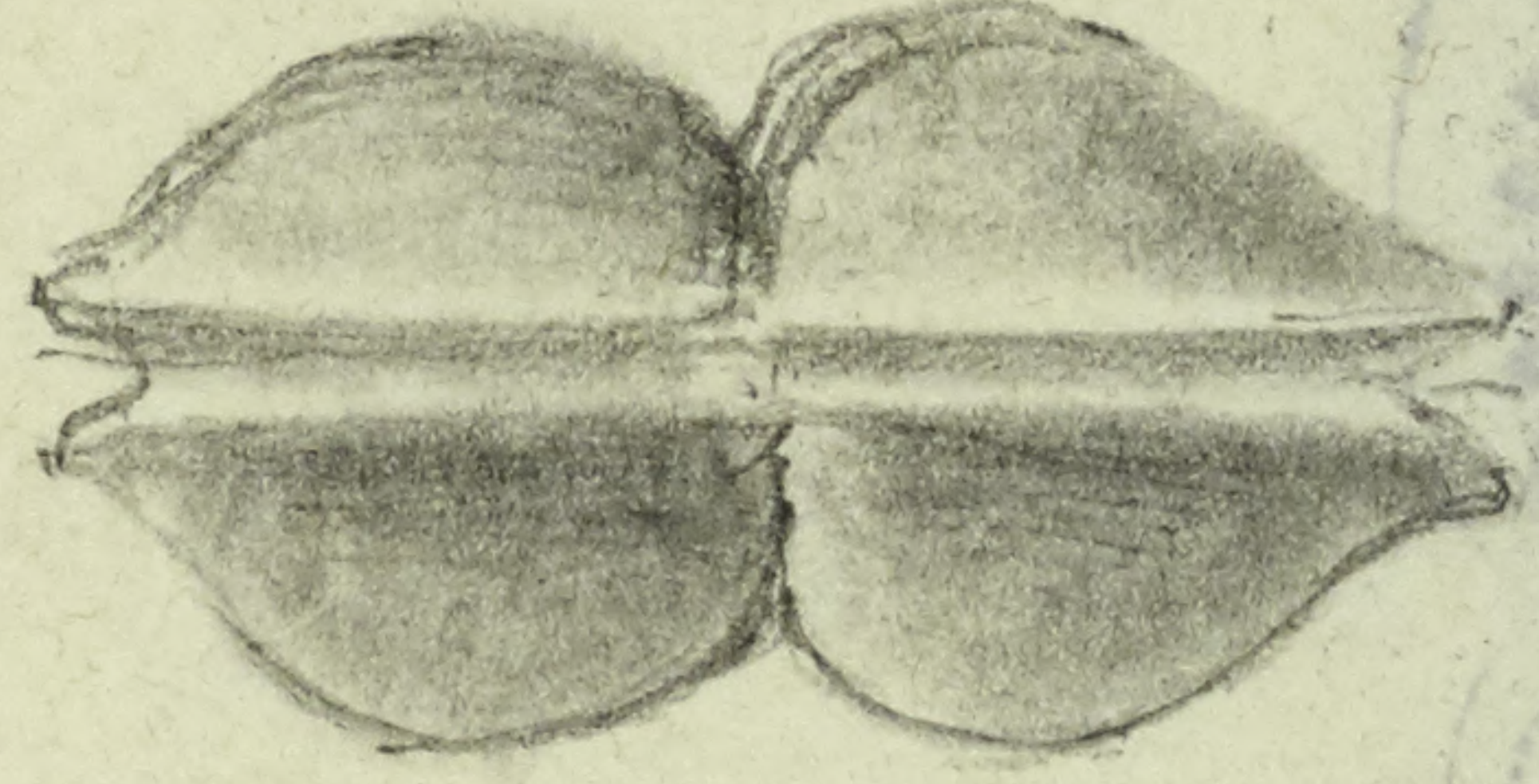
„ Call. heterophylla, "Elliott Skeldon"
fragment in Herb. A. Gray

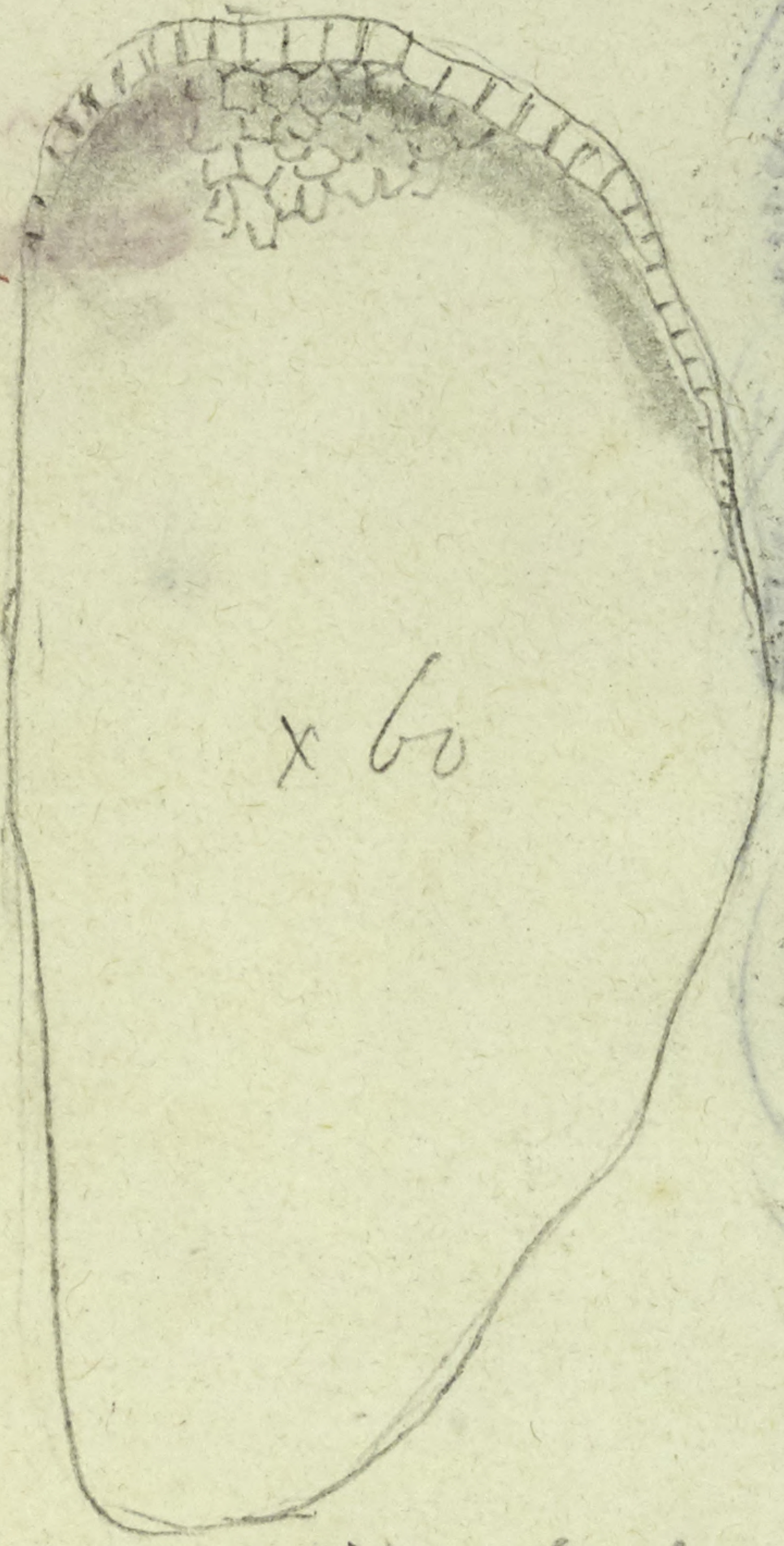
x 30



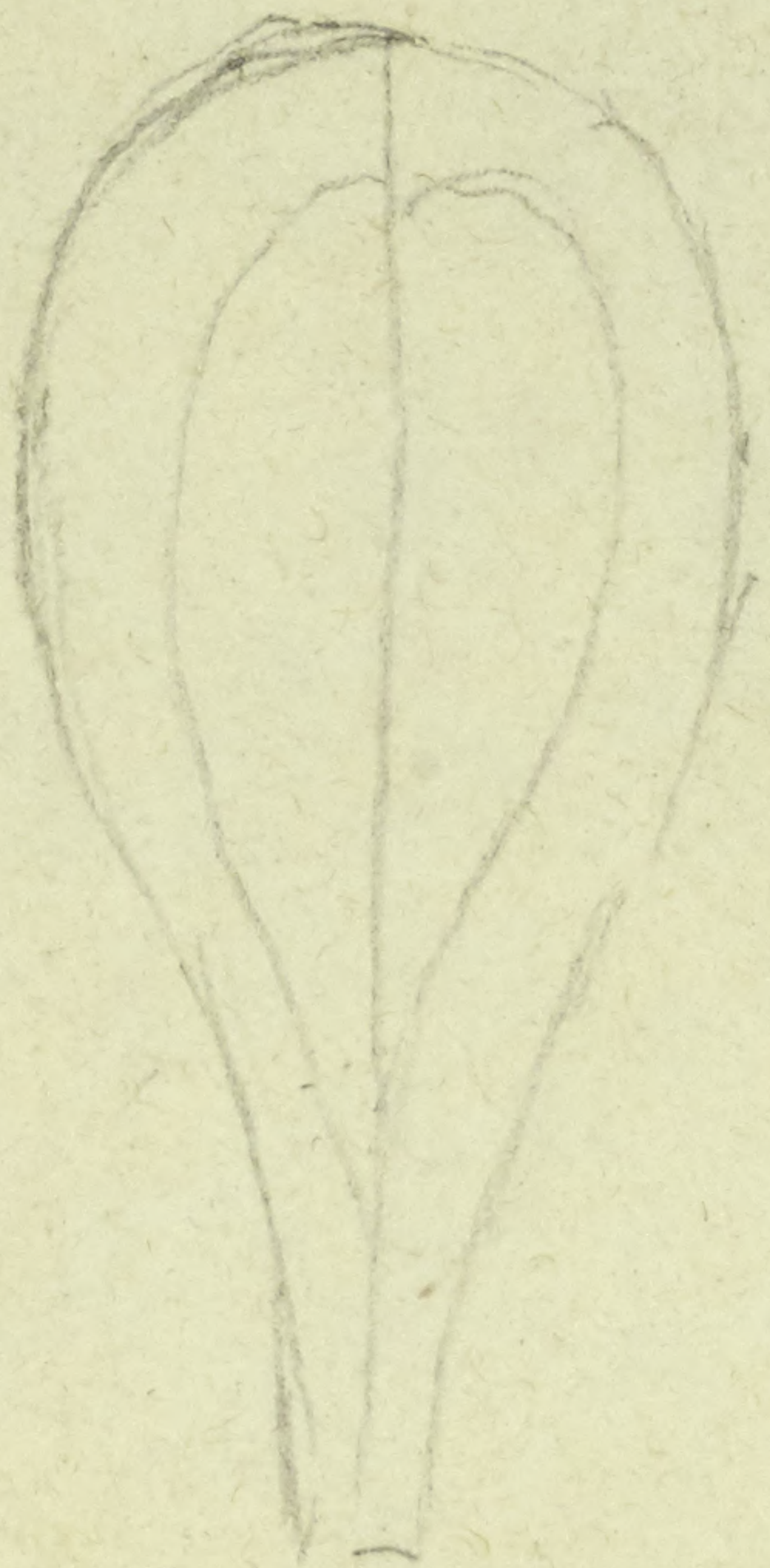
Embr. 2/3 as long
as fruit

$\frac{29 \times 29}{30} = 1.0 \times 1.0$ mm





wing extremely
narrow



x 10

892

a bractea, longstyled water plant, with plenty of good anthers

Leitch & Corlies

DRUGGISTS

South-west Corner Fifth and Market Streets

Octob 20 1864

Callitriche Asae Grayi

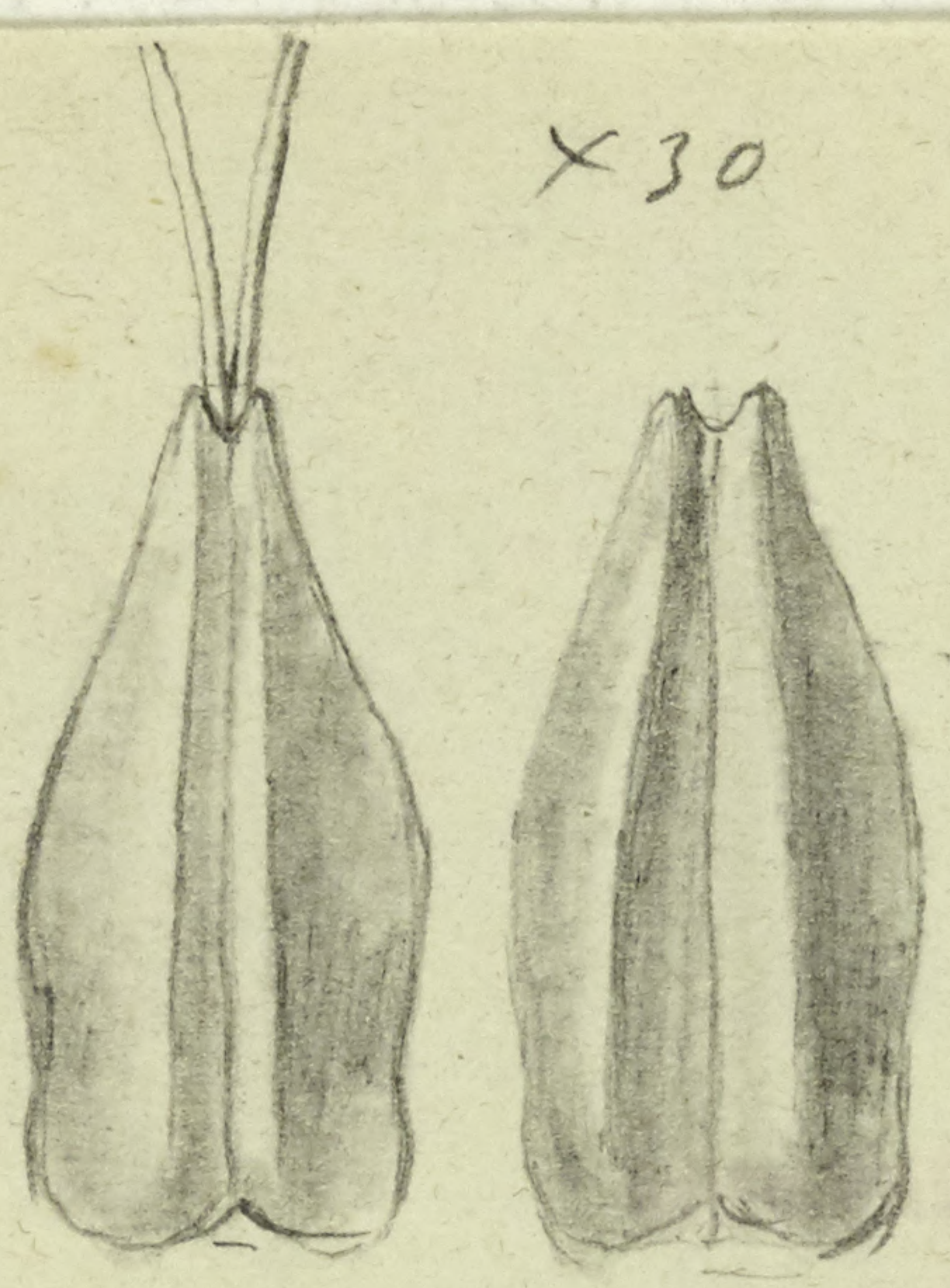
terrestris

Buffalo N.Y.

Judge Clinton 1863

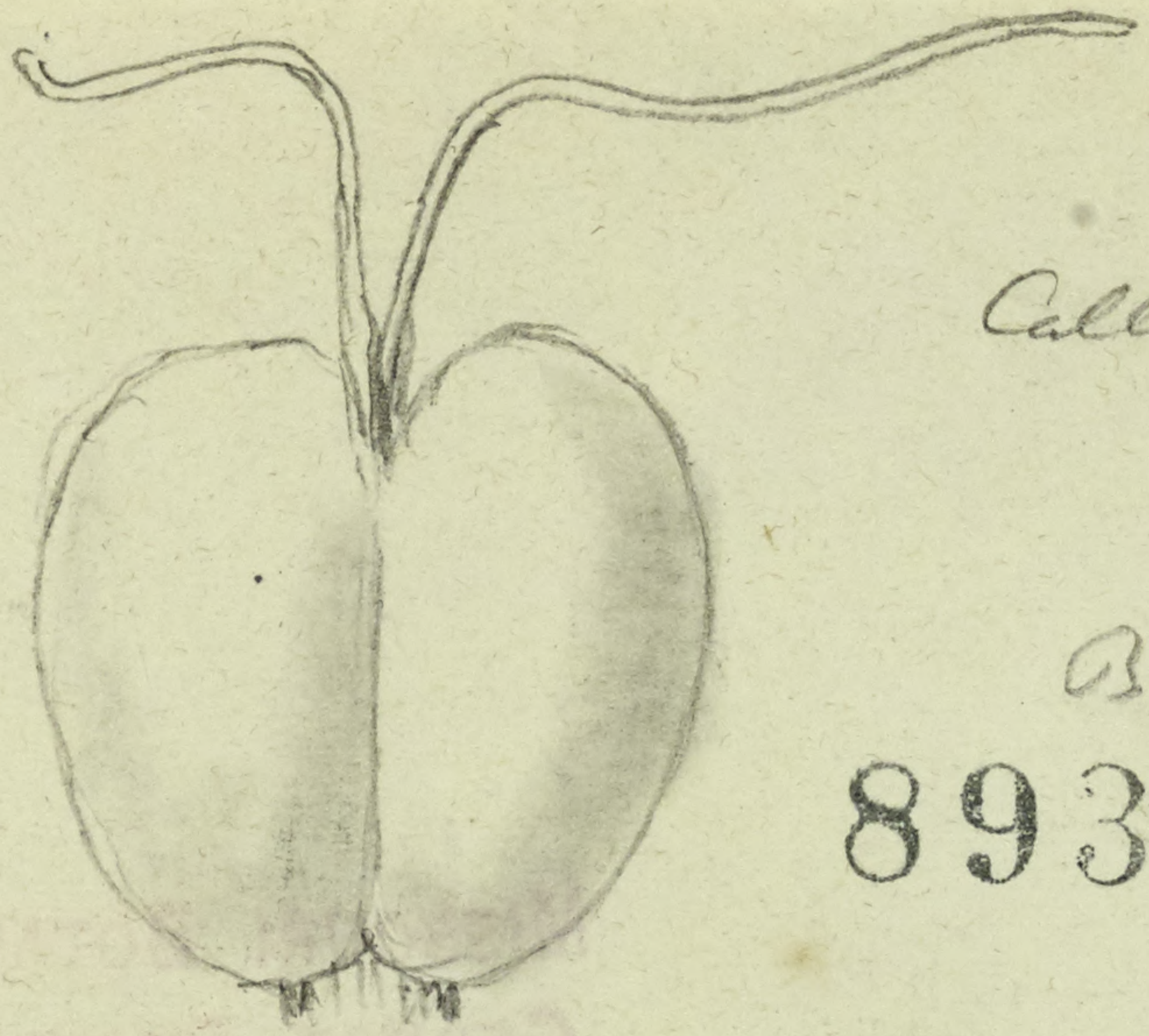
893

×30

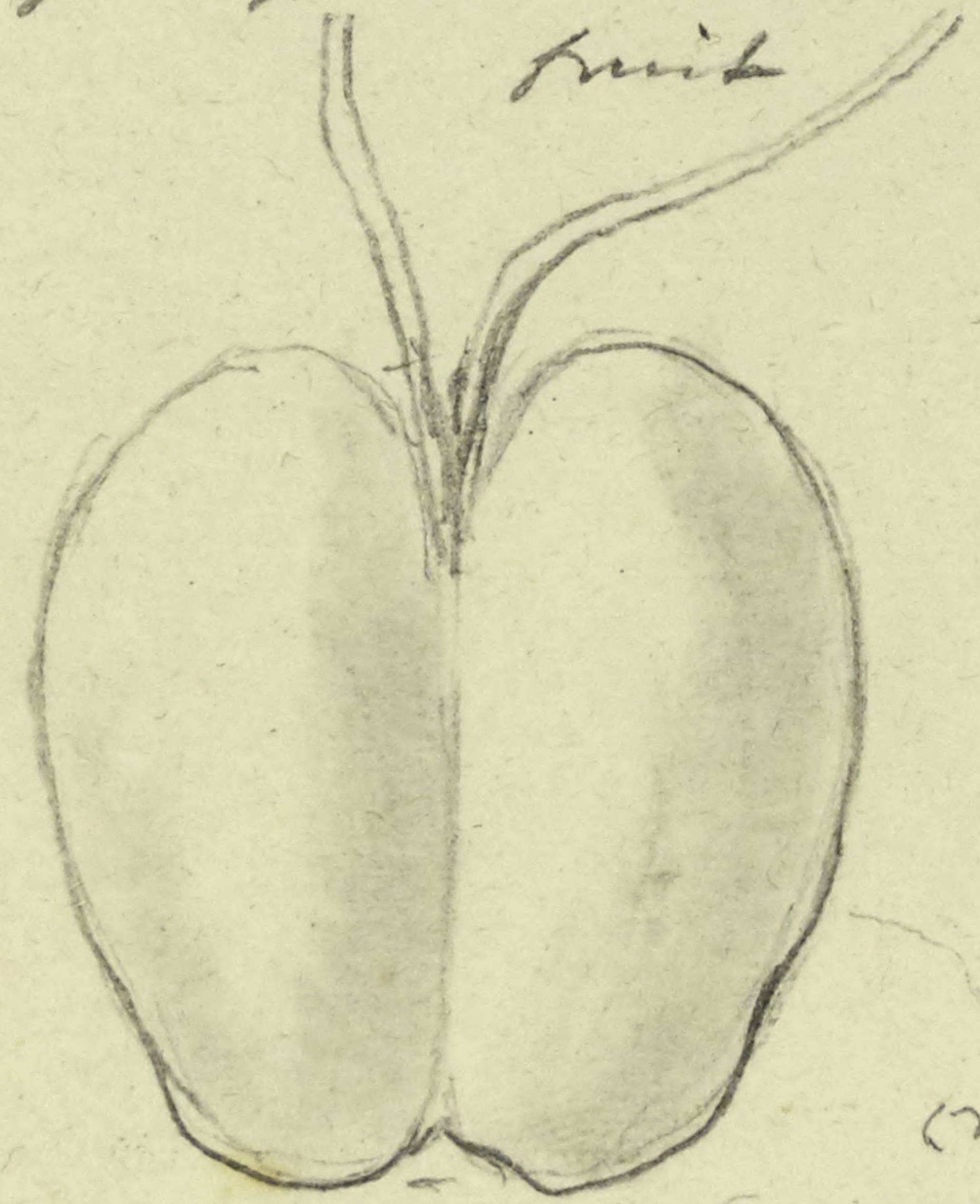


younger ? older ?

fruit



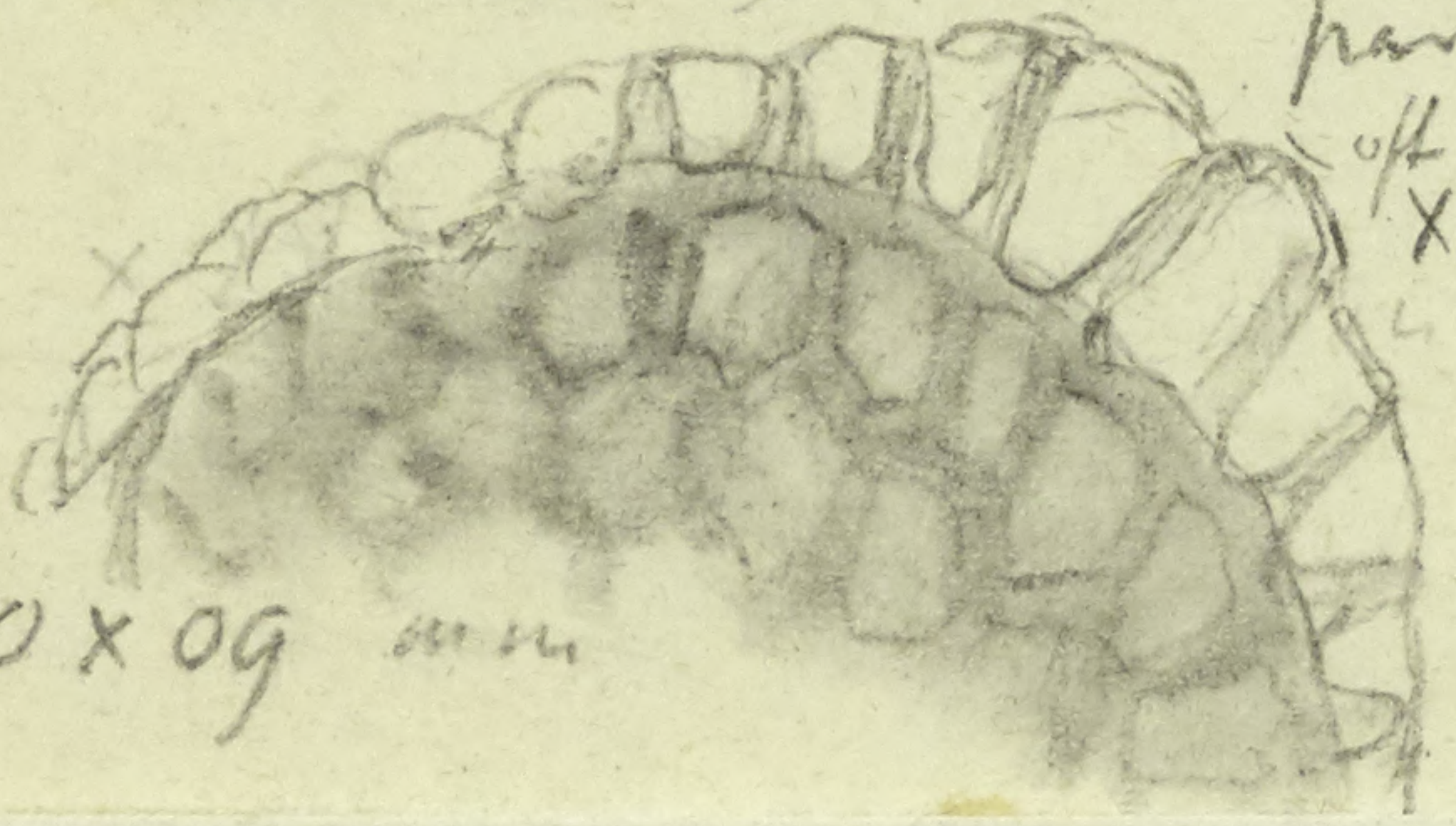
$\frac{25 \times 26}{30} = 0.8 \times 0.9$ mm



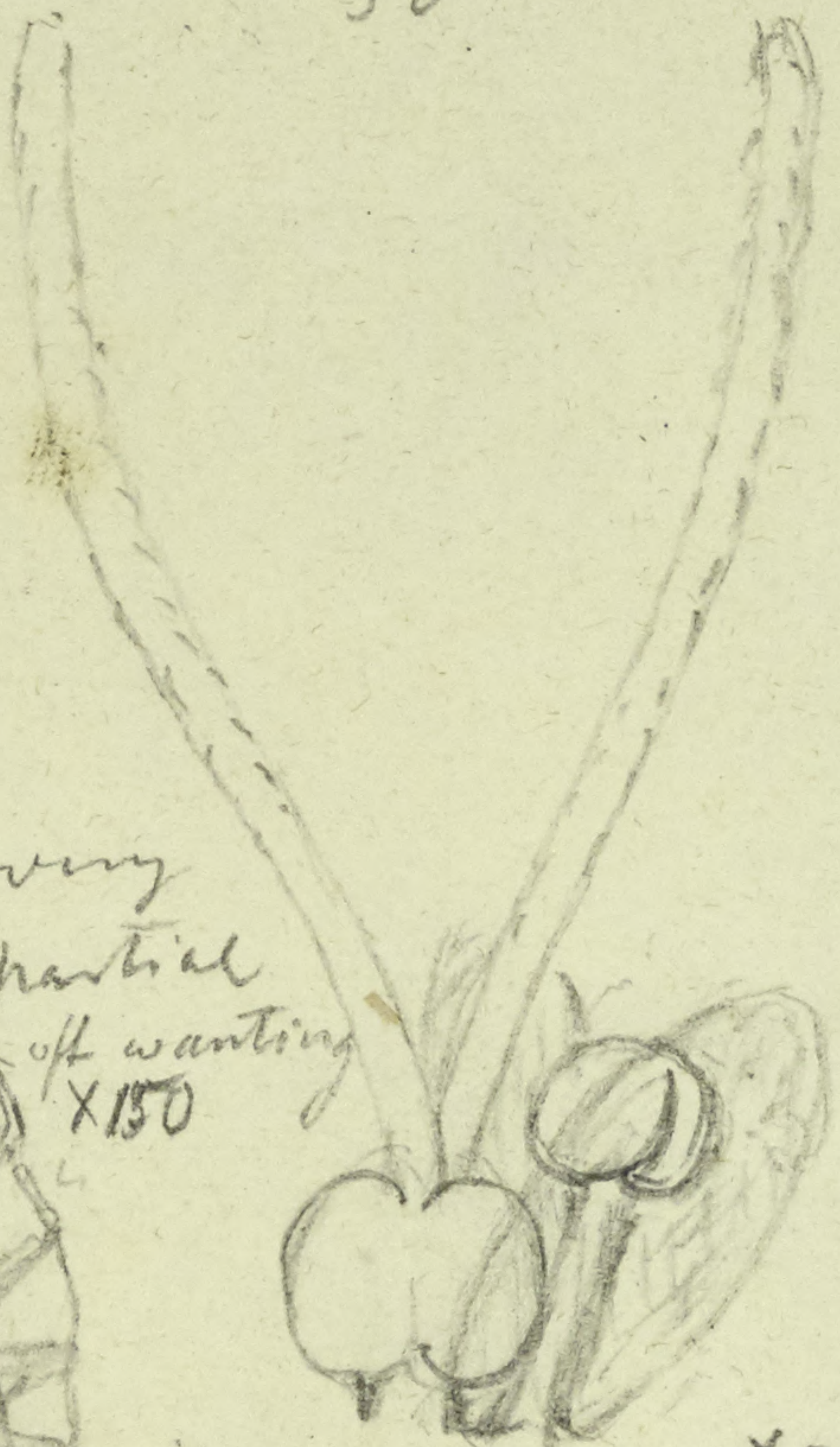
crust very partial

oft wanting

×150



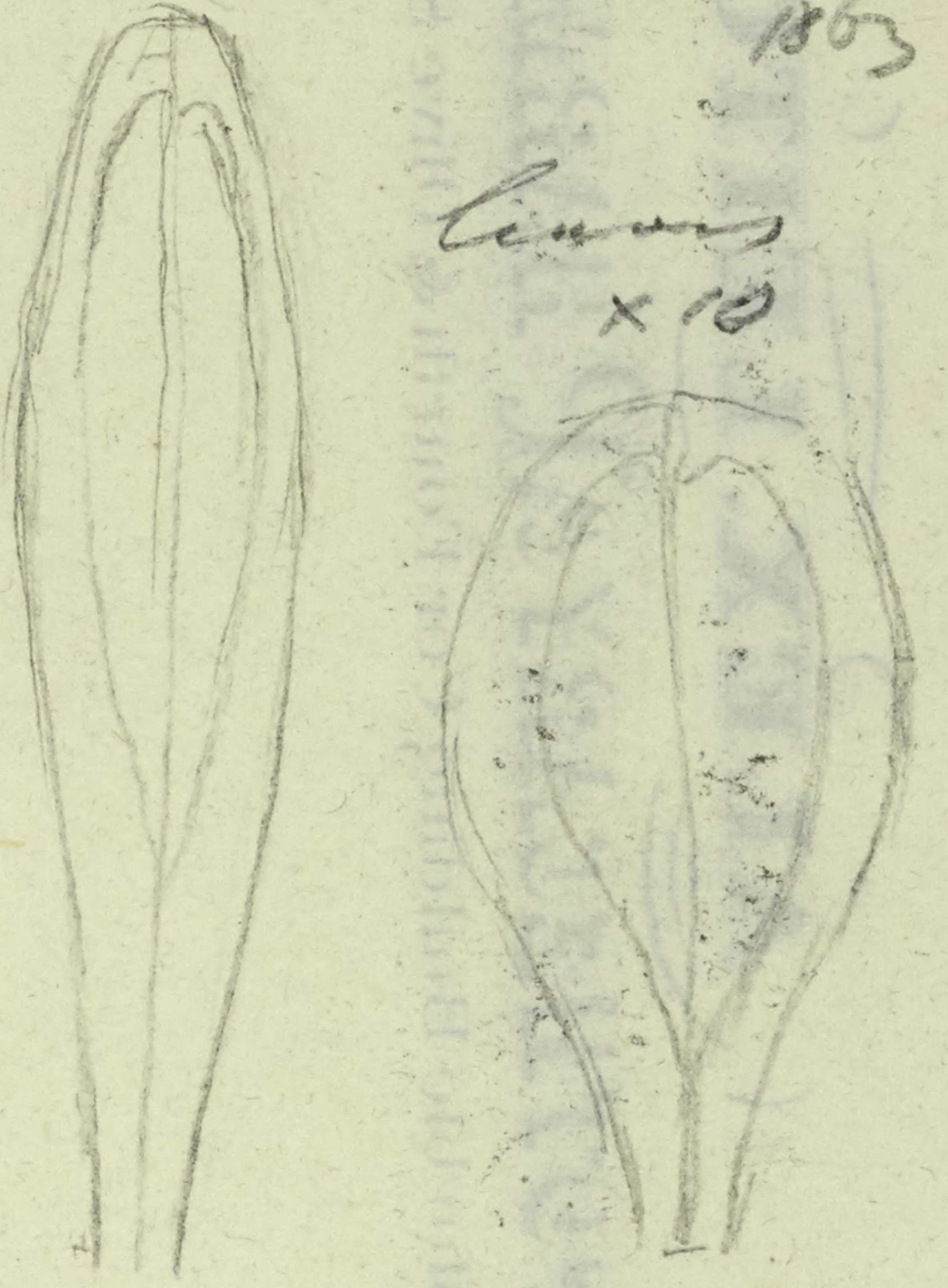
$\frac{29 \times 28}{30} = 1.0 \times 0.9$ mm



×30

leaves

×10



bracted male flower, abortive

female flowers fertile.

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MISSOURI
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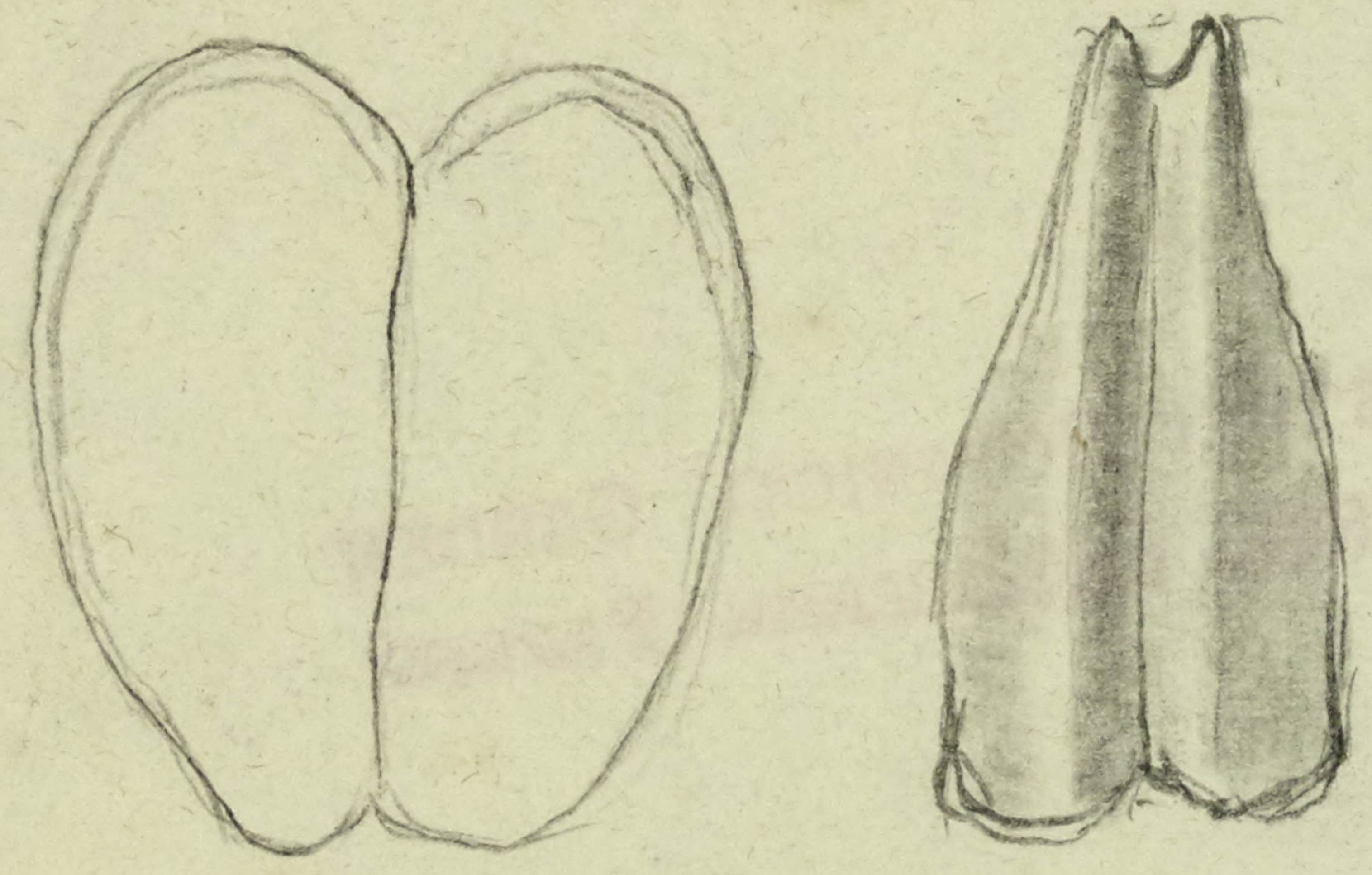
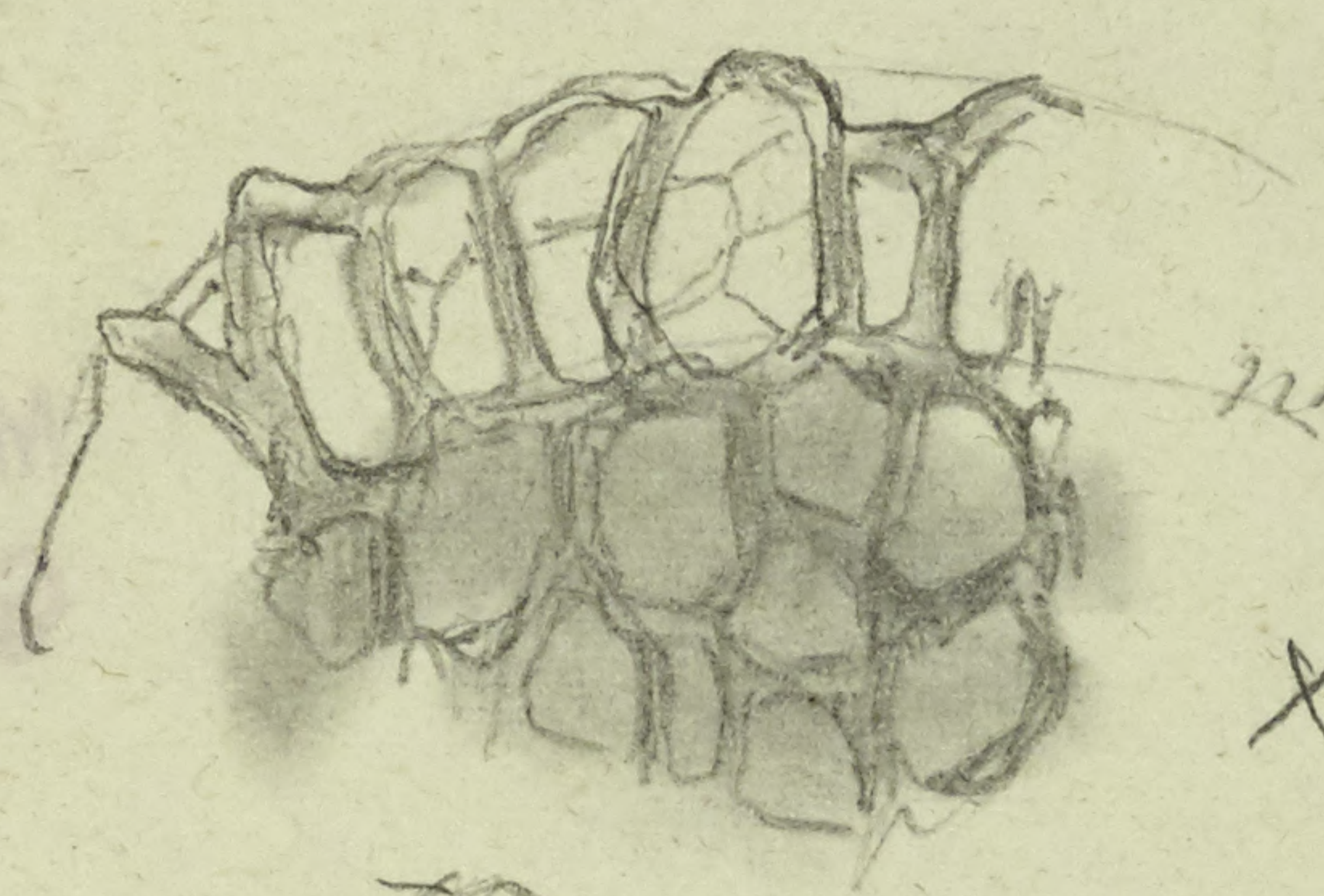
Callitriche   Octob 11 1864

forma terrestris

Dedham Mass; Hb Gray

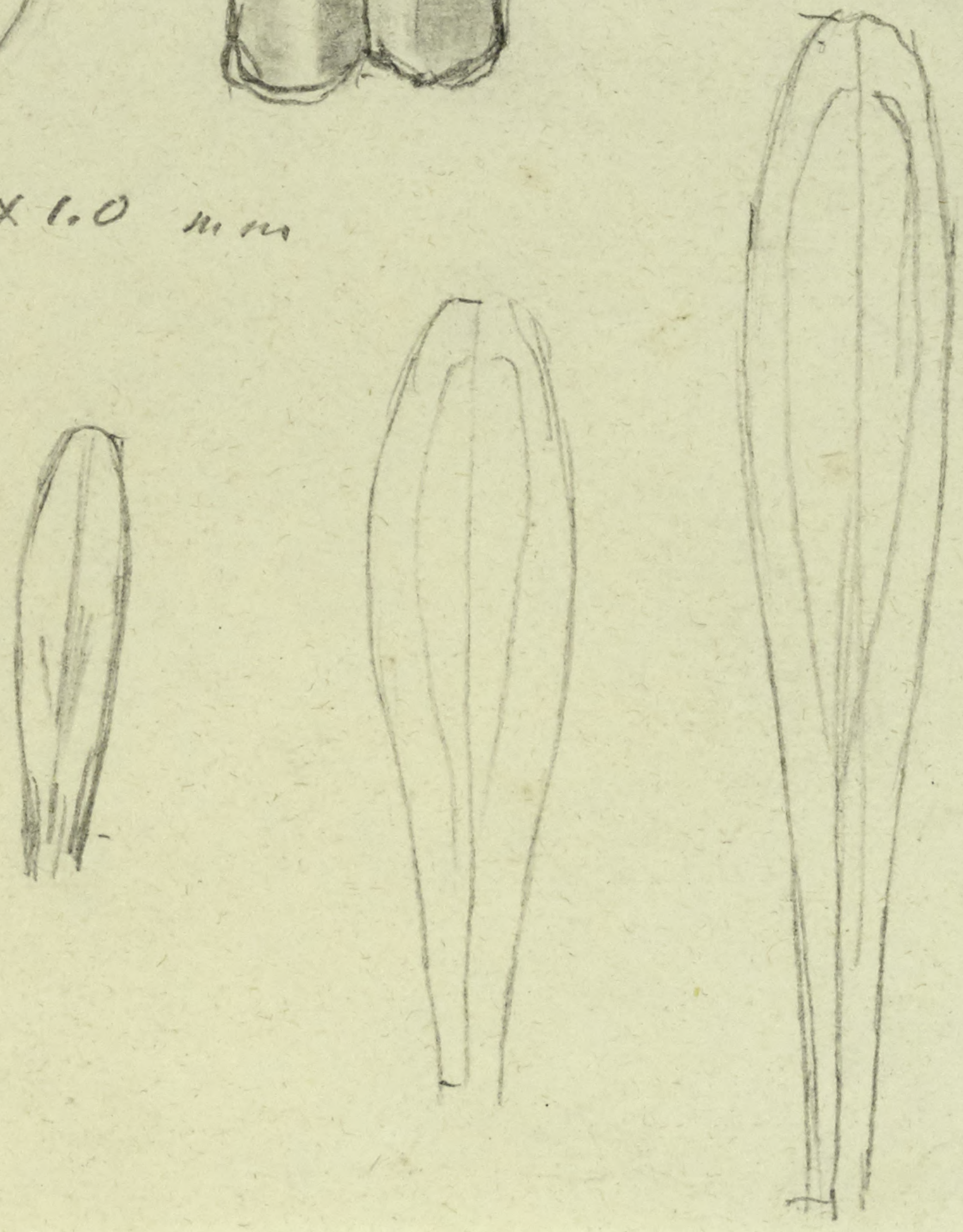


26×29 / 30 × 0.9×1.0 mm



narrow crest

×150



894

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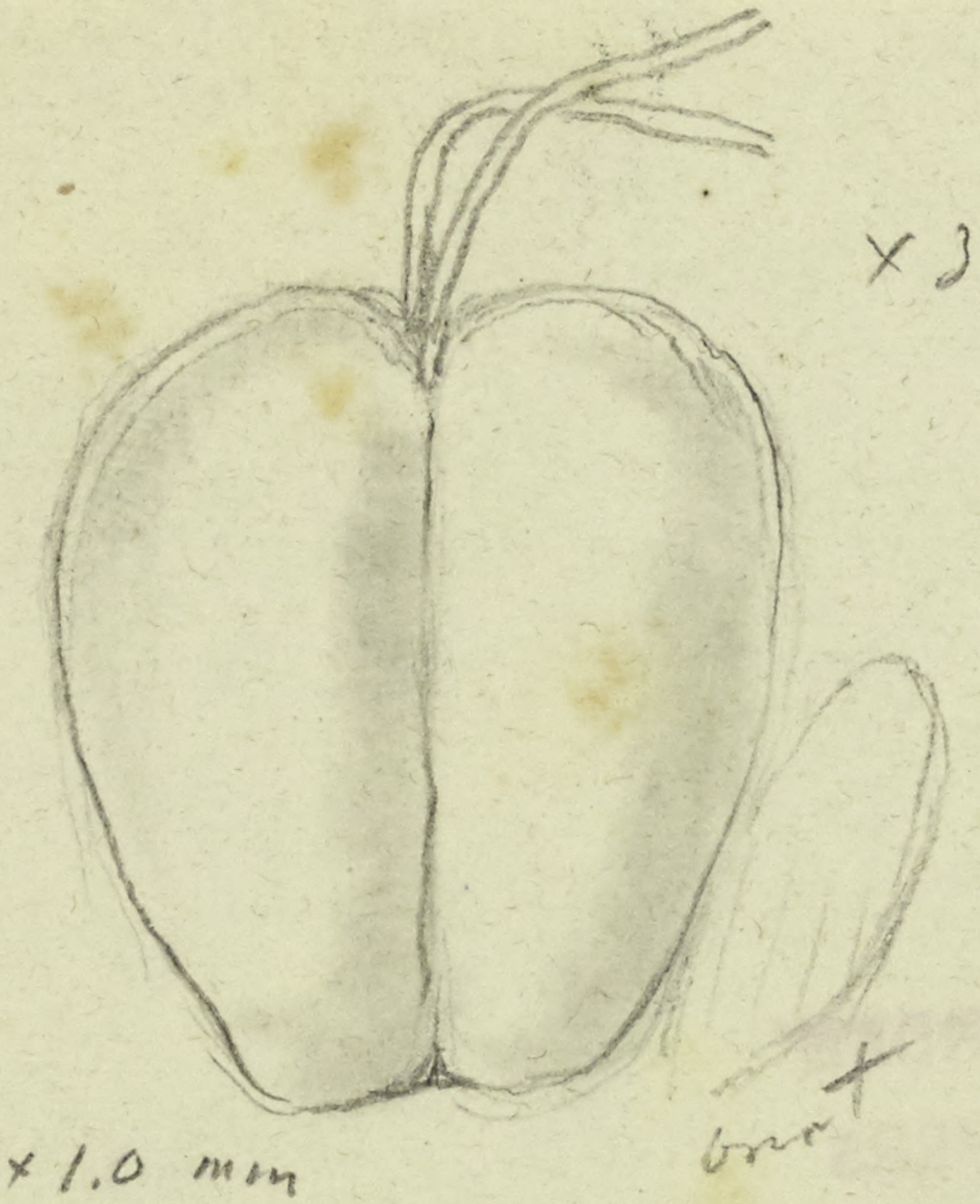
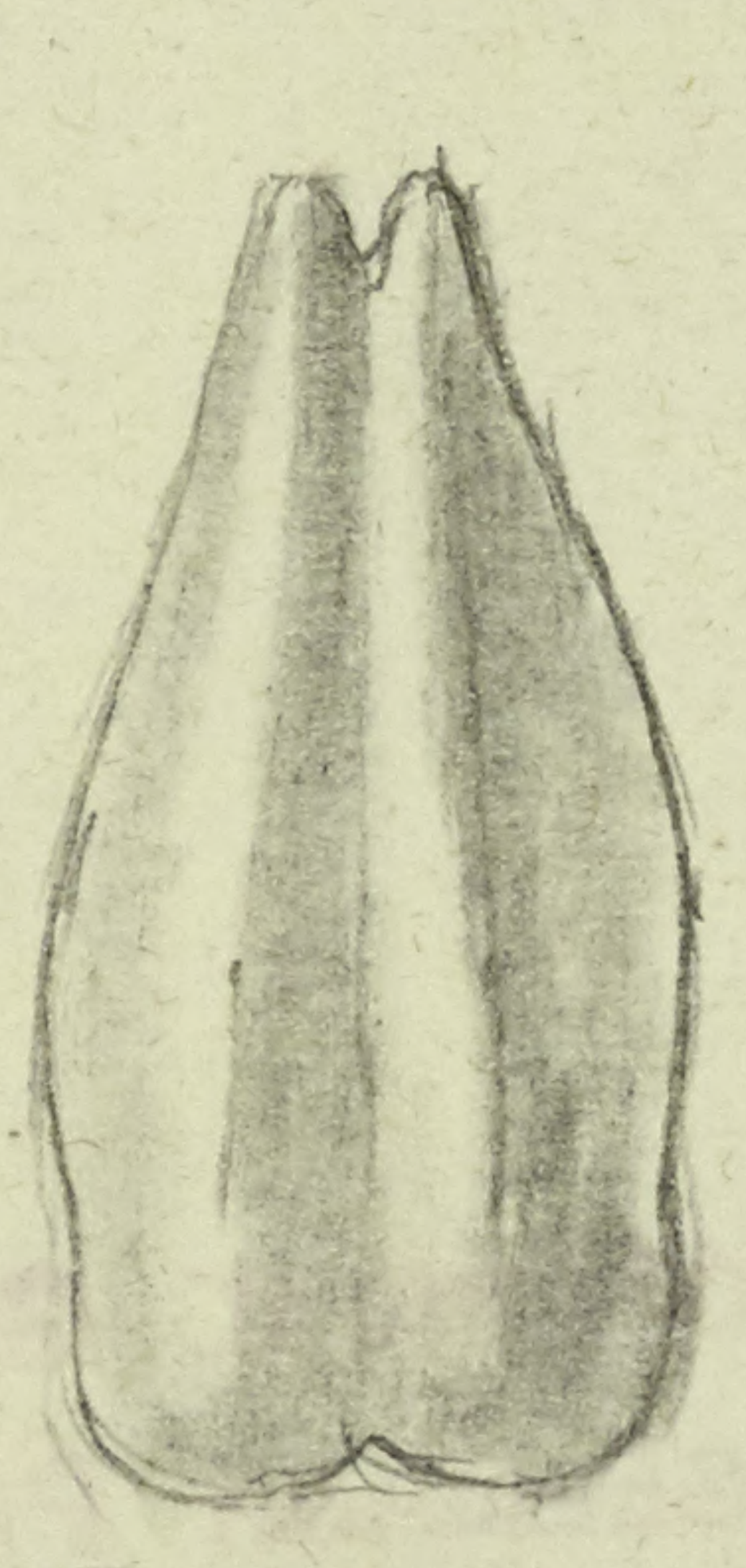
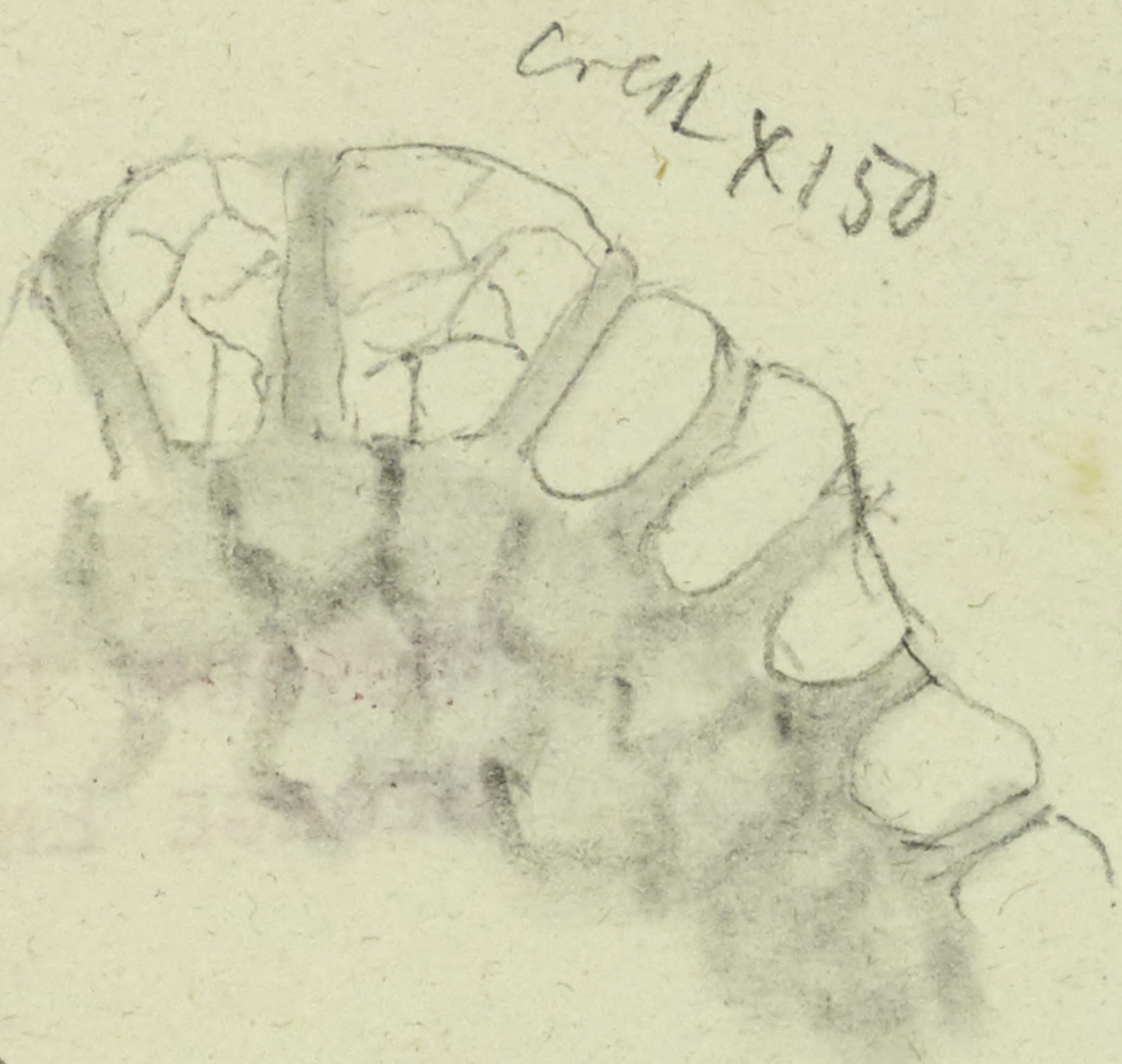
Marble Building Cor. Fourth & Olive Sts. St Louis, Mo.

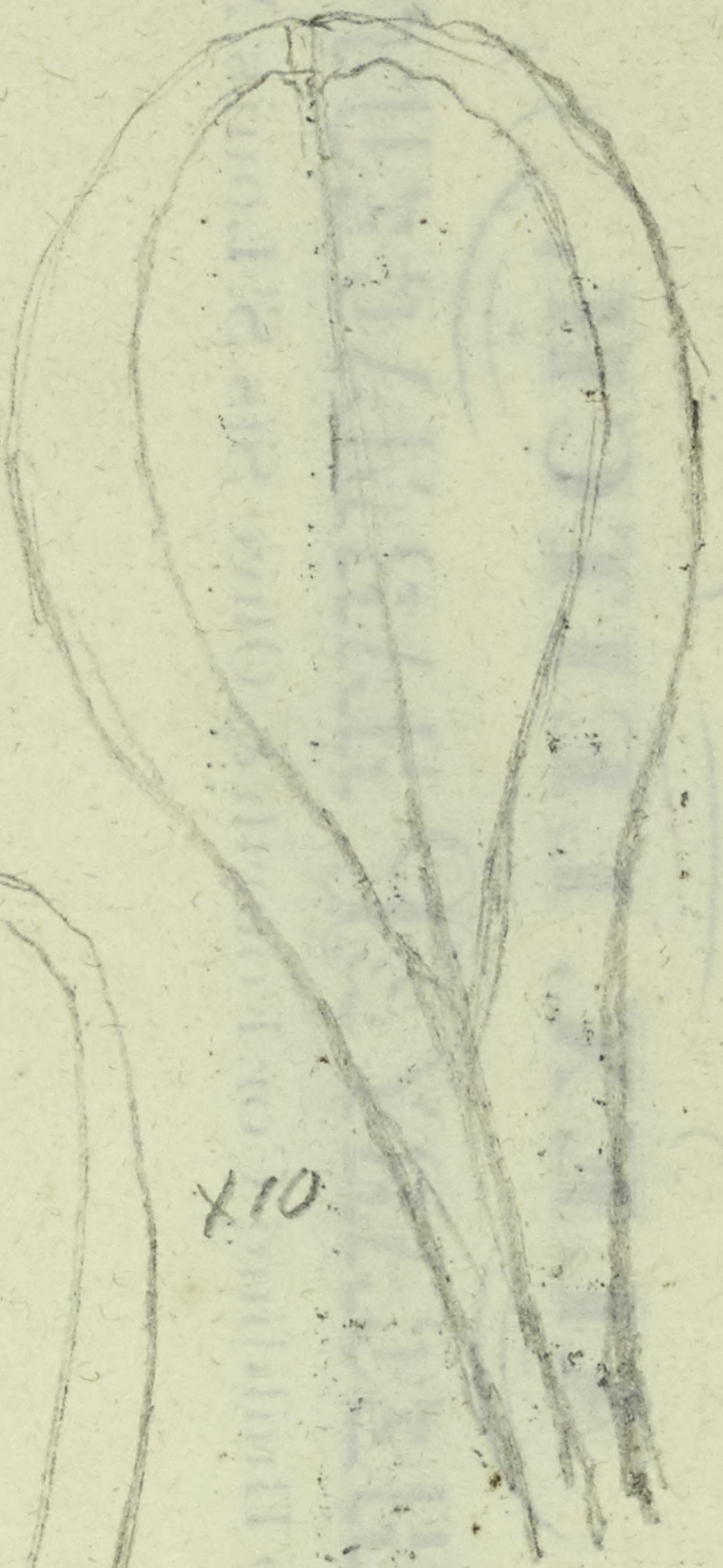
895 "Callitriche Terrestris" Octo 12 1864
Herb Acad Philad.
C. Pickering



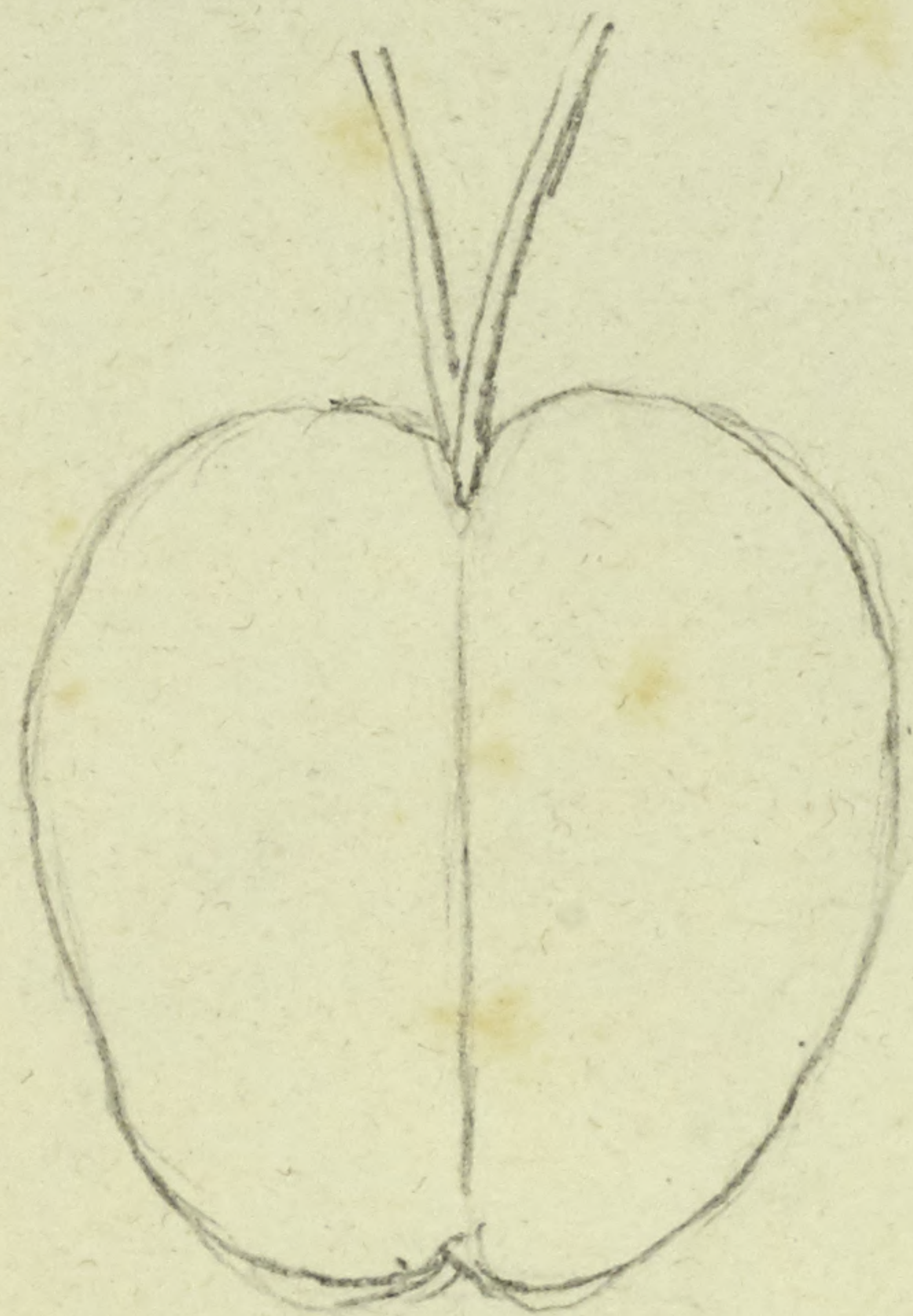
27 x 30 / 30 = 0.9 x 1.0 mm



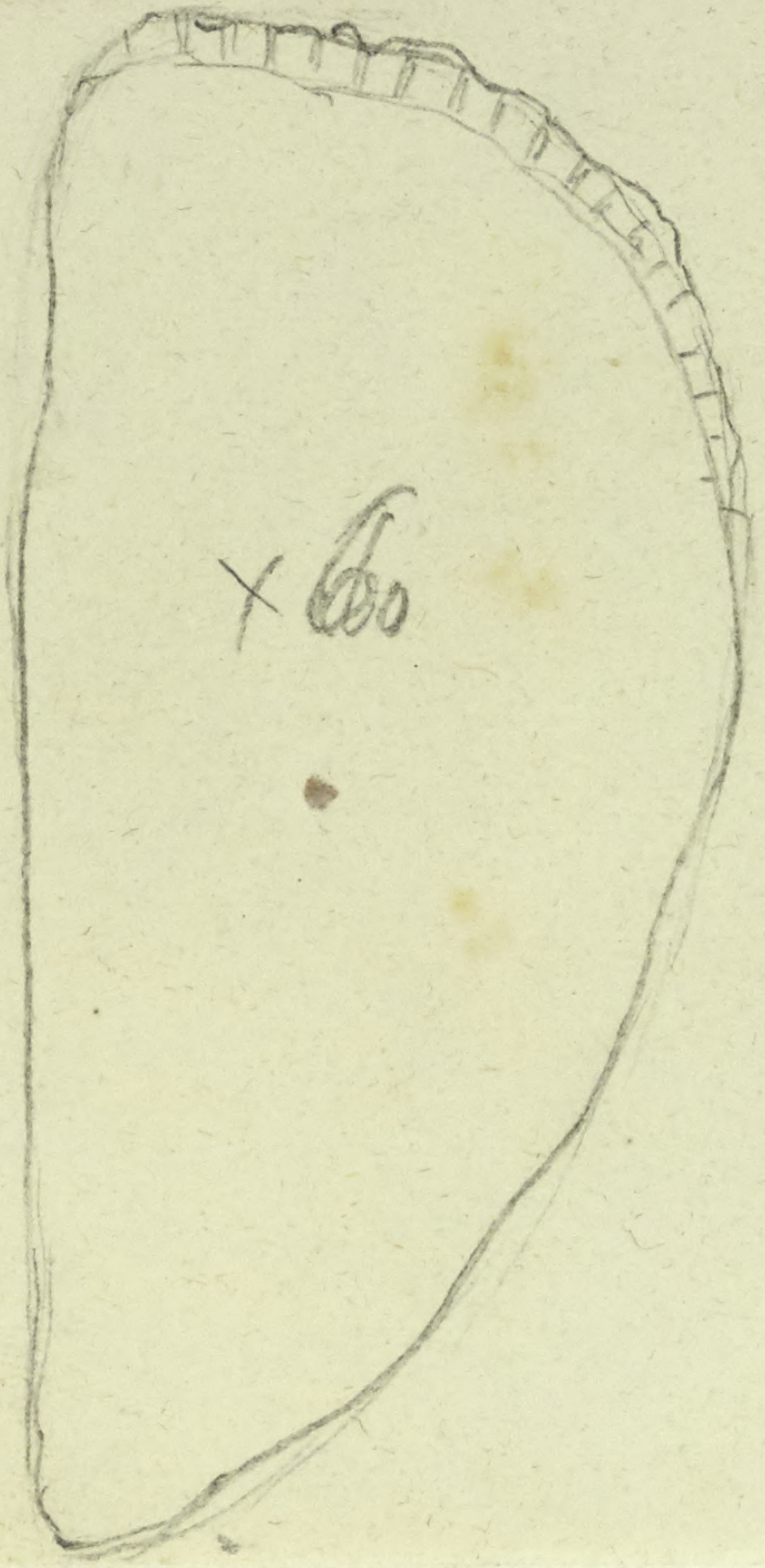


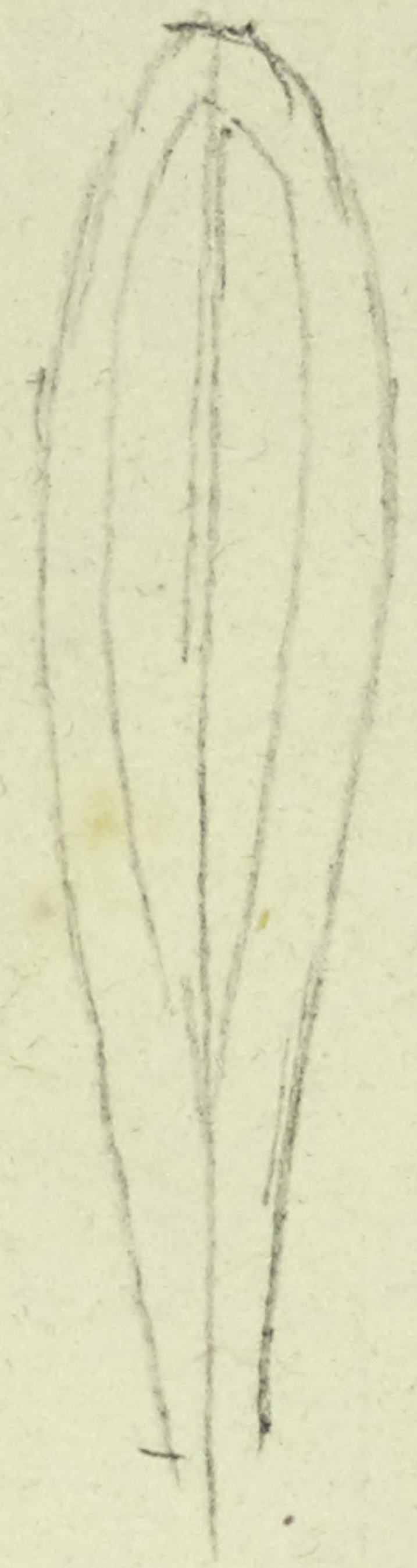


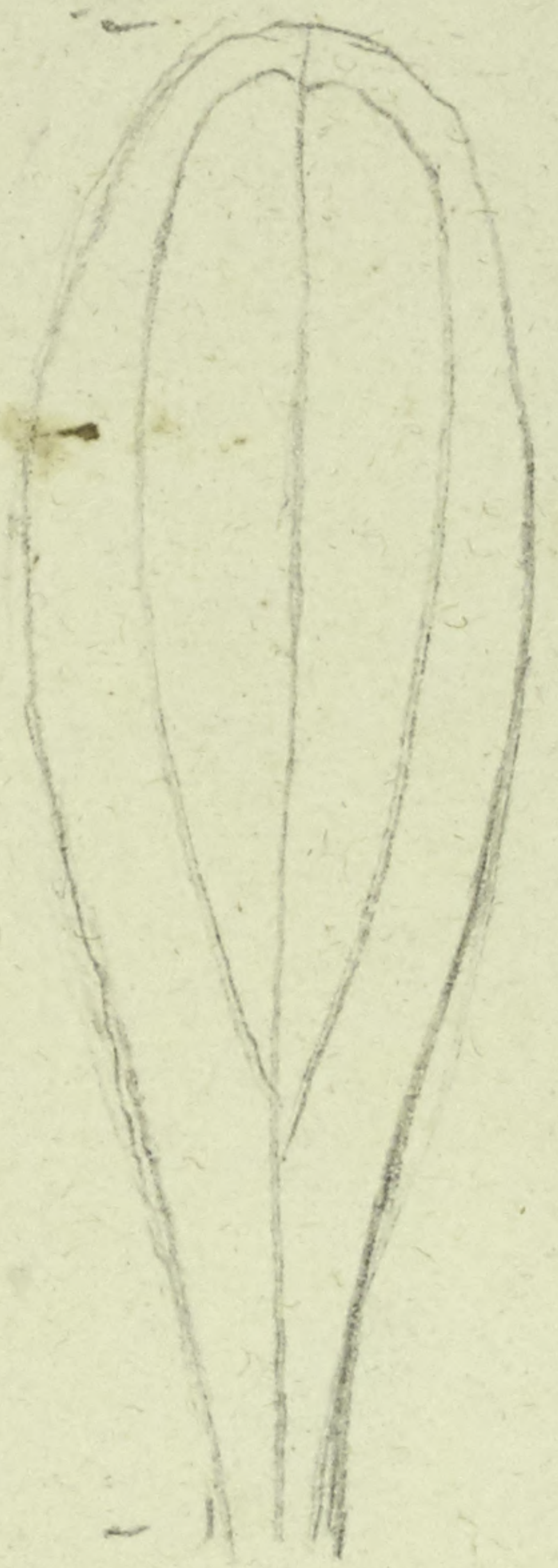
Leaf of a
subaquatic branch
with fertile stamen



28 x 29 / 30 = 0.9 x 0.9 mm







cm 0 1 2 3 4 5 6 7 8 9 10 copyright reserved
MISSOURI BOTANICAL GARDEN

ALEX. LEITCH,

APOTHECARY & PHARMACEUTIST,

Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

0 1 2 3 4 5 6 7 8 9 10
cm
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